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Condensation of five speeches concerning the need for, planning of, and nature of educational parks. Summaries of discussions and recommendations of conference groups are presented concerning the following facets of the educational park--(1) clientele, (2) curriculum and instruction, (3) facilities, and (4) fiscal, management, and social aspects. A section defining the characteristics of an education park is included. (FS)

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Second Annual
Nova University
Conference

EDUCATION PARKS

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Nova University Press, 1968

PREFACE

This is a report on the Second Annual Nova University Conference, conducted with the cooperation of the Nova Complex, National Educational Associates for Research and Development, U. S. Office of Education, and Educational Facilities Laboratories.

Last year our conference focused on curriculum and instruction. This topic was chosen because of the need to learn about techniques of individualizing instruction and supervising in-service teachers.

This year our focus was on the "Education Park". The term lacked definition and there was no uniformity in the use of the term. There was a question whether there could be a park in an area without a large urban population. To some, the only use for the park was to solve de facto segregation problems in the city. A concentrated study of all these considerations seemed essential.

In an attempt to cover all facets of the Education Park and to explore its relationship to students, the conference was organized into six groups: clientele, curriculum and instruction, facilities, fiscal, management, and social aspects.

Each group started from a different frame of reference; yet each needed information from the others in order to make final recommendations.

To aid each group in its deliberations, a topic coordinator was chosen in each area. In addition, professional writers and recorders were present at all sessions. These writers attempted to record not only the conclusions reached by each group but, equally important, the flavor of the discussions. We hope that this will provide for you, the reader, an on-the-scene perspective which would not otherwise be possible.

This publication contains condensations of five important speeches, summaries of each group's discussions and recommendations, and a section defining the characteristics of an education park.

No conference runs itself; many people are involved in its planning and execution. I particularly would like to thank each member of the advisory committee for giving his time and advice to make this conference a success. Additional thanks must go to the topic coordinators and writers. I also would like to express a great deal of appreciation to I/D/E/A which assisted in preparing the program and provided two conference writers.

Individuals who gave major addresses at the conference prepared excellent papers. Each was selected for his expertise in a different area and each made a valuable contribution. Their comments provoked participants to a higher level of intellectual discourse.

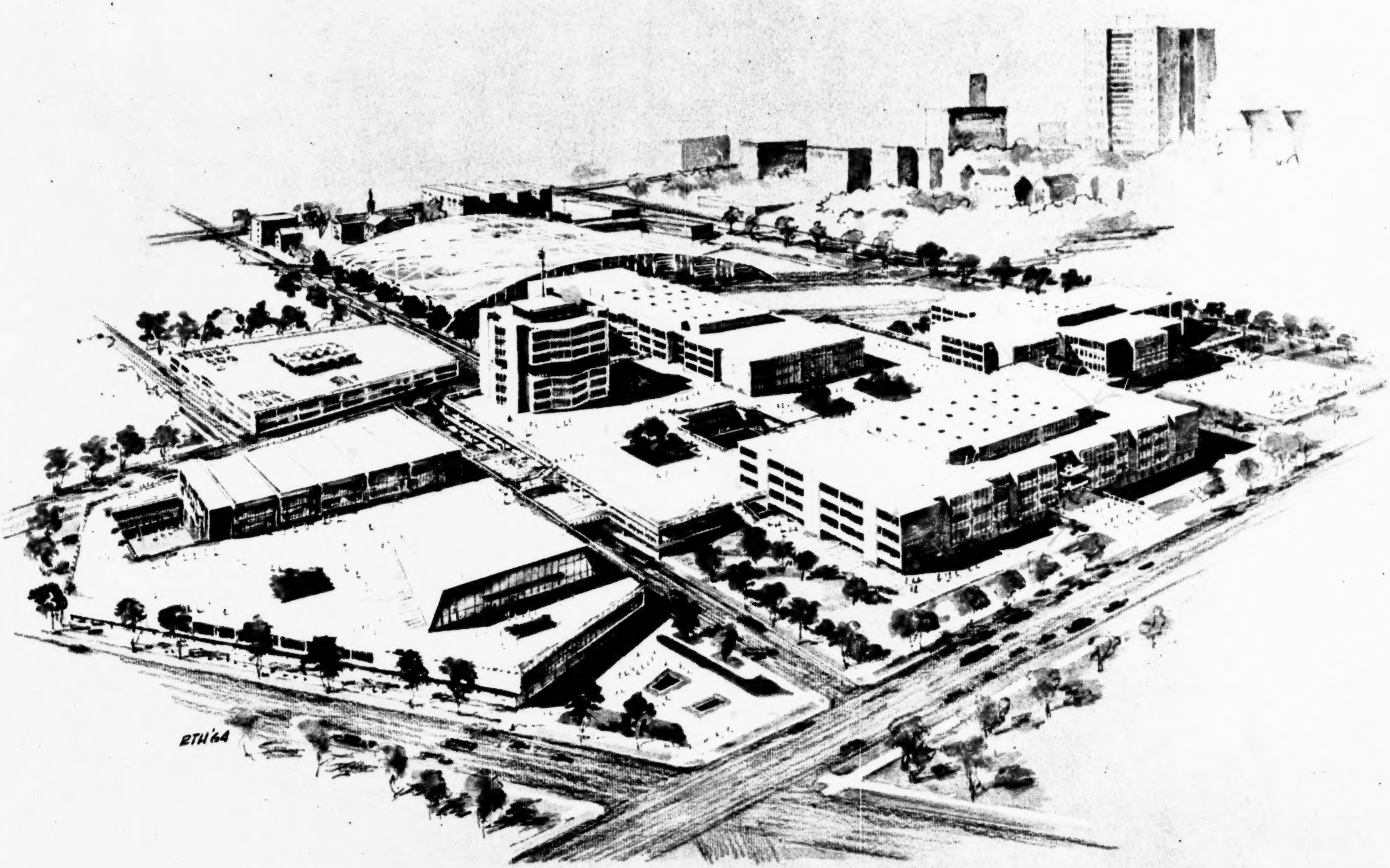
Three persons deserve special thanks. Fred Lica did an excellent job in planning and coordinating the program. My secretary, Miss Helen Fabrizio, worked tirelessly on myriad details to make conference arrangements more efficient and pleasant and to fulfill requests of all participants. Mrs. Doris M. Jones, editor, organized our thoughts into a coherent publication.

Finally, a vote of appreciation to all participants, whose names are listed elsewhere. They came to a working conference and did just that - worked. If this publication makes a contribution to the educational community, it is due to their efforts.

We look forward to our third Nova Conference in April, 1969. It will focus on another major issue in American education.

Abraham S. Fischler

June 30th, 1968



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THE SPACELESS AGE

Address by J. Graham Sullivan

People perceive things differently. What are problems to some, may seem like opportunities to others. Today, for example, some of us view our changing world as an ugly duckling while some of us see it as a beautiful child.

We all have different attitudes toward change. There are those who think it should be accelerated and those who think we should apply the brakes and retreat into the traditional. Our present American scene reflects a society that is indeed enmeshed in a conflict of perceptions.

Primarily, I view today's world as a shrinking one where already we are beginning to feel, psychologically and socially, the effects of living together in crowded cities. We are moving fast from the space age into the spaceless age -- the time when the time barrier of distance, for all practical purposes, will cease to exist.

It is possible that in 50 years we will experience even greater technological and social change than in the past 50 years -- and such change will have great bearing on the shape of education for the future. Tomorrow's transportation system may be so complex, so inexpensive and so rapid that a geography class studying Thailand may take a day's field trip to Bangkok as a matter of course. Children, within a matter of minutes, may be transported 50 miles to a large community or regional learning center.

In the future, planned communities may seed the nation. Already, General Learning Corporation and the University of California are designing a community called Irvine, California, which will incorporate a total planning system and, by the end of this century, support a population equal to that of Los Angeles. Just the educational component of this system will be geared to serve the entire population from infancy through old age.

Will all communities of the future take this form? If so, what are the inherent implications for education posed by communities with a perfect socio-economic mix, controlled industry and business, and educational services stretching from cradle to grave? Will such planning stifle creativity? Will we have to fight to keep the child from losing his self-identity? Will we let him be pigeon-holed in the community structure and thus open the way for Huxley's predicted "brave new world" of alpha's, beta's and gamma's?

It is also conceivable that schools as we know them will cease to exist. The community, itself, may become a complete learning center. In fact, the child may never have to leave his home to learn because each home may be nearly a total learning environment, electronically beamed to a complex of learning resource center.

It is beyond our capabilities to remotely predict what the educational world will be like in 50 years. Why is this? The major reason is that technological progress, affecting all aspects of our world, is getting ahead of our ability to adapt to it. Some suggest that we are creating a monster we are not prepared to live with, an environment we are not adapted to. As evidence, they cite present racial discontent; the spiraling suicide rate, especially among the young; and the increasing number of dropouts from society, of which the hippie is the most flamboyant example.

Some of our most creative children are not challenged by our educational system; some of our brightest are repulsed by a society whose values they do not understand and we cannot explain. These things are happening today. How much worse will the situation become as we become more sophisticated technologically?

We need change in education *NOW* -- to cope with existing problems, and to be prepared to live with the demands of a highly complex, industrialized society. We cannot face the flood of tomorrow's knowledge in our well-worn ark.

Unfortunately, in education, we have talked change to death. It is a well-worn cliche. What do we really mean by change? We mean either correcting deficiencies in our present system or finding new approaches to the educational process. I believe in the latter.

Meaningful change necessitates setting up a system which will provide a continuous assessment of what we are doing, where we are going and what needs to be done next. Our present system is outdated, nonresponsive and locked in by tradition.

What real changes on a broad scale have we made in the last 50 years? Is the classroom, the school day, or the school year any different? Not really. Are training programs for teachers or administrators any different? If so, the differences are hard to identify. Is our administrative structure different? Don't we still have superintendents, assistant superintendents, principals and teachers? Have their roles changed in light of changing demands and conditions in our society? Are teacher-administrator relationships any different than they were 50 years ago?

Are school board members better prepared to assume their responsibilities? Are we utilizing community resources more effectively than we did 50 years ago? In my judgment, we are doing this less effectively.

Are we putting enough money into research needed to provide school boards and administrators with alternatives? Are we more adequately financing education? Are we still building schools in ghettos and perpetuating segretation?

Do we know whether the few changes we are making really make a difference? What major curriculum changes have been made? New math, new physics and maybe one or two others.

Compare all this with dynamic changes that have been made in almost every other field of endeavor in the past century. If what I have said shocks you, I intended it to do so. If what I have said is even partially true, what steps should we be taking to really change the system?

First, *we must change the public attitude toward schools.* Schools are not separate but an integral part of the whole community service program and money spent on education is money saved on welfare and other social programs. We spend $2,000 a year to keep a boy or girl in reformatory or prison but when public school costs rise from $600 to $700 a year, many school boards had better be ready to resign. We also must realize that to provide quality education for *all* our children, costs will be greater for the disadvantaged. At present our society spends less money educating ghetto children than is spent on children from suburban families.

Second, *we need an active improvement program for school-community relations.* We must enlist outside resources as co-partners and not consider educational improvement and innovation our own private preserves. Educators must welcome ideas and help from all quarters.

Third, *parent cooperation should be solicited.* In ghetto areas, parent misunderstanding of, or hostility toward, the school is often reflected in student attitudes. Perhaps the establishment of school-parent planning committees could help bridge the communications gap which exists between the school and the community at large.

Fourth, *schools need to be more relevant, both to the community and to students.* One of the facts brought out by the Riot Commission Report was the prevailing attitude in the inner city that "education is irrelevant".

Dr. Dobson, of the U. S. Office of Education, explained: This divergence of goals (between the dominant class and ghetto youth) makes schools irrelevant for the youth of the slum. It removes knowledge as a tool for groups who are defiant to the ethos of the dominant society. It tends to destroy the sense of self-worth of minority-background children. It breeds apathy, powerlessness and low self-esteem. The majority of ghetto youth would prefer to forego the acquisition of knowledge if it is at that cost. One cannot understand the alienation of modern ghetto youth except in the context of this conflict of goals.

To solve this problem, we should aggressively work to make every school meet the needs of the school neighborhood. A school with 90 percent of its students going on to college needs different things from a school where 90 per cent of the students go to work after graduation.

Fifth, *curricula need to be relevant.* Present curricula and materials are poorly adapted to life experiences of disadvantaged students. Irrelevancy of materials to the ghetto environment has made these students skeptical about the utility of what they are being taught.

One of the key elements in meeting these five needs listed is the classroom teacher. Unfortunately, our colleges and universities are too often guilty of preparing teachers to teach better in classrooms of the last decade. What we need are imaginative training programs which will prepare teachers to cope with critical problems today. We need teachers who can enter inner-city schools and rural schools and creatively adapt to the uniqueness of their given situation. It is in our college and university teacher-training programs that change is especially vital.

A potential for creating this change lies in the recent Education Professions Development Act which provides grants and contracts to attract qualified persons to the field of education. Aid will be given to attract and qualify teachers and teacher aides to school districts experiencing critical teacher shortages; financial assistance will provide advanced training and retraining of elementary and secondary education personnel.

Hopefully, this act will introduce a new variety of teachers into the classroom by encouraging professionals in the community to take short-term or long-term teaching assignments. In addition, local people may be used as subprofessional school personnel where, especially in ghetto areas, they can contribute not only to the educational process but to improving school-community relations.

Special types of staff members may be seen more often in a "typical" school since new programs will enable personnel to continue their education and specialize in related fields such as counseling, social work and psychology. Personnel also will be trained to carry out tasks already identified as national priorities -- teaching preschool children and youngsters from low-income areas.

The EDP Act also requires, for the first time, an annual study of education manpower needs. These studies, essential if change is to be meaningful and continuous, should prove invaluable when we are determining deficiencies and areas that need new and creative approaches.

The Office of Education also is working with the educational community and other government agencies to simplify administrative procedures relating to use of federal funds in EDP programs. We are moving toward comprehensive program packaging which will require only one application to receive money from several funding sources.

In addition, the OE is working with Congress in an effort to obtain money for advance planning and evaluation. This would help us to avoid the crash approach to program development which we now are forced to employ, primarily because of delayed Congressional legislation and appropriations.

Earlier I noted that education has made few significant changes in its organizational structure, administrative hierarchy, curriculum, facilities, etc. However, we do have scattered throughout the nation, as a result of new developments, some promising clues that we should pursue. One of these is the concept of the education park.

The idea of an education park -- a totally planned system to provide quality education for all children on a basis of true equality -- has not been studied enough yet for anyone to make judgments on its validity or the form it should take. However, the diversity of education park projects, sponsored either wholly or in part by Office of Education funds, offers the following possibilities for exploration:

> Pooling a larger number of facilities and materials in one area, which may result in a program of higher competencies and individualization of instruction.
>
> Broadening enrichment programs in athletics, music, arts and other extra-curricular activities.
>
> Creating more effective programs for educating the handicapped within the regular school.

Providing technical innovations, such as information retrieval systems and computer-assisted instruction, which could be afforded by parks but not by neighborhood schools.

The education park, with its size and coordination, offers the promising prospect of affording each child a superior education. With an availability of human and material resources and services not otherwise possible, the park's capacity for innovative experimentation and educational improvement is great. The park could become a valuable adjunct for university-based research, it could become a catalyst to promote urban pride -- it has many possibilities.

On the negative side, the very size of the park is a possible pitfall. It could become a vast unworkable monolith. It removes the school from the neighborhood. We do not yet know how great the problems of financing such an institution might be.

Education parks are not going to offer magical solutions to existing education needs. If they are going to succeed, we must more carefully pinpoint present needs and take positive action to see that these needs are met. We will still need good teachers, imaginative approaches to individualized instruction, and curricula relevant to the student. Parent cooperation and community support will become even more vital if we are to utilize the park's extensive facilities to their maximum potential.

All the needs will still be there. To quote Harold Gores: "A school is three things: people, ideas and a place, and in that order of importance". We must not get carried away with facilities, logistics and organizational problems. We must keep foremost in our minds why parks are being considered at all -- to provide the best possible education for our children.

To do this, the park must be adaptable to change. I feel that the constant infusion of innovative ideas is inherent in the education park. Commitment to the park concept is commitment to change -- and change is the hallmark of a healthy school system.

TO PLAN A PARK

Address by Sidney L. Besvinick

Since the momentous Supreme Court decision in 1954, the racial mix within our schools has undergone much change and, while solving some problems, we have created many others.

Our efforts to effect integrated schools have been curious indeed. We have bused students, gerrymandered school districts, and consolidated, decentralized and reorganized schools. If you want innovation and creativity -- we have tried it here.

Integration, however, represents just one of many circumstances which have placed city schools in America under enormous stress and continually test the viability of our contemporary educational system.

Schools and curricula of the nineteenth century and the first half of the twentieth were essentially rural and small-town in their characteristics. They are out of phase today. We need an educational program relevant to needs of students and communities in the great metropolises which characterize the second half of the twentieth century. We need an urban school concept for urban America. Some educators suggest that the education park may be that concept.

A few months ago a work conference was held in Fort Lauderdale under the auspices of the Broward County Board of Public Instruction, Nova University, and the U. S. Office of Education. Participants met to determine what is meant by an education park and to explore the feasibility of planning a park by subjecting the idea to systems analysis. The group represented a variety of interests not usually asked to meet together -- researchers, analysts, administrators and innovators from all parts of the country. I am indebted to them for many of the ideas I shall present.

Literature about education parks is sparse and the term is only vaguely described. Generally speaking, the phrase is used to depict a single plot of ground, several acres in size, where all school-age children in a community are brought for their education. It accommodates from 8,000 to 15,000 learners.

Obvious advantages are those associated with increased size and lower costs -- improved purchasing practices, variety of materials and offerings, instant desegregation, and increased special services. Problems created by size are increased anonymity of students, decreased parental participation in school life, commuting and traffic problems, and a diversity of operant values.

The education park is envisioned as a new and pivotal social institution within the community. The central core, about which the activities revolve, is education but beyond that point all similarity to the contemporary notion of a school disappears. This complex would be for all learners -- regardless of age. Like Las Vegas, it would be in use around the clock all year long. It would provide both initial and re-entry education and it would establish close working ties with other social agencies in the area, including health, welfare, work and recreation. In short, it would be an all-encompassing social community plaza with the education and participation of the total community as a focal point.

Everyone who lives within the community will be served by the park. All boys and girls from all socio-economic and ethnic backgrounds will be brought to the "school". A relevant program, designed to help students learn to function in today's world, begins at the nursery level and progresses through the equivalent of junior college. There will be programs for educables, slow learners, normal and gifted children; programs for the wide range of individual interests; programs to fill community occupational needs; programs to inculcate civic responsibility.

For the dropout the door will always be open since the park will be used by persons of all ages. For older adults, the center will offer not only cultural courses and hobby activities but retraining programs to help them maintain a viable position in the labor market.

There will be an increase in related services which emanate from the park. Doctors, nurses, psychologists and a team of personal and public health personnel will be available within the complex to offer counseling and clinical service as well as to instruct in the educational center. Welfare agency representatives, with an office on the grounds, can maintain direct contact with their clients. There also will be lectures, concerts, an art gallery, films, recreational sports, library (fiction and reference), and even legitimate theater presentations.

The organization and administration of the complex must be viewed from at least two different positions -- management of the institution in its entirety and internal management of the educational aspect alone. Since it will be quite unlike any social system which has functioned before, the park can make use of creative and different approaches to organization.

While the primary objective of the park is education, this will not be its only function and the titular head need not be the classic educational administrator, the school superintendent. Perhaps even the notion of one man as the authority figure should be rejected. The driving force in the park will be the integrated way in which several institutions of society work harmoniously. Instead of the usual line and staff format, why not a management team which plans and acts in concert, sharing the responsibility for decision-making?

There should be a constant interplay between service institutions in the complex and the educational area. Continual access to the emerging labor pool will be provided for all businesses in the community and students can learn those skills in demand by employers. Students also can participate in many park activities during their leisure time. The key word for all activity in the park will be relevance. Does it help the learners -- young and old -- to understand, to adapt themselves, to fit the world more to their liking?

As they strive to mediate between social services and citizens, community planners have three unifying concepts they can utilize:

The park is a center of facilities -- providing special laboratories, sophisticated equipment and training devices which could not be made available for a limited number of learners.

The park is a center of social services -- providing on-the-job training, health examinations and exposure to a variety of constructive leisure opportunities.

The park is a center of communication -- providing a community meeting place where neighbors can share and explore ideas and information of interest to the individual and to his society.

In the broadest sense, the park can restore to a sophisticated and jaded urban America the opportunity to savor the personal benefits of the small community while retaining the mass benefits of the metropolis.

At the heart of the park is the educational center, with certain unusual physical characteristics. It must be large, to accommodate the thousands of students who will attend; centrally located; planned and designed to permit adequate traffic flow patterns; and sufficiently well-constructed to present an image of stability to the community.

The center will provide many levels of instruction for every age group. In every way, from class size to courses taught and methods used, arrangements will be geared to flexibility and readily adaptable to developing interests and needs of the community. One obvious advantage of the park is the potential for an unbroken articulation of learning experiences from early childhood to post-adolescence.

Since the park will serve a large population, students will range from one end of the continuum to the other in learning ability, cultural background, interests and goals. The size of the student group, however, will permit each one to find others to whom he can relate socially, intellectually and culturally. The learner will be carefully evaluated when he enters and as he proceeds through learning activities. His personal, physical, psychological and emotional characteristics, his learning rate and developing interests then will be used to select the work which seemingly will be of most value to him.

Clusters of learning activities, oriented toward and at the capability level of each learner, will be designed to help him identify and achieve goals which will make him an effective participant in the community. The wide variety of students would require extensive individualization of this program.

This undertaking necessitates a highly skilled and flexible instructional team whose empathy and understanding of the needs and problems of learners would counteract the "dehumanizing" effects of a large plant and a large number of students. By studying banks of data about each student with whom they work and by periodically working with each student individually as he progresses through a package of learning activities, teachers and supervisors can help to develop each student's sense of belonging.

Teachers must be highly knowledgeable in their fields of specialization and well versed in pedagogical practices which permit each learner to progress at a rate in keeping with his capabilities. This range of teacher skills (pedagogically, from those who work with the handicapped to those who work with the gifted; intellectually, from architecture to zoology) would be impossible to duplicate in each neighborhood school so that they would be available to everyone.

Implied and embodied in this approach are new concepts of pre-service and in-service training and the development of new organizations of instructional personnel. Prospective park teachers would serve an apprenticeship or "residence" coupled with clinical instruction. Both new and experienced teachers would participate in videotaped micro-teaching episodes, learn how to use computer-assisted instruction, and learn to interpret data available about their students. Short courses, taught by the supervisory staff and university specialists, would update the instructional component and maintain professional competence.

The advantages of consolidation and size in a park are obvious. It would be possible to purchase expensive specialized equipment and facilities -- a planetarium, for example -- because all learners in the given district would be housed on campus and have ready access to them. Centralization also would permit acquisition of a variety of technical aids which could facilitate individualization of instruction and learning.

By bringing together into one location a large student group, many programs and a multiplicity of resources, the instructional component of the park would contain certain interwoven factors. It would be comprehensive, flexible, carefully planned, continuously evaluated and self-renewing.

Heterogeneity will abound in the student body, yet students with common interests will be in contact with one another. Programs will run the gamut, yet each subject area will allow each student to pursue it as deeply as he wishes. The center will be all-inclusive by age and ability levels and in its attention to community needs, making every effort to cater to vocational and avocational needs of each learner.

The instructional component will be subject to a subsystem analysis. Each of the center's major subdivisions -- organization, staff, facilities, program, etc. -- can itself be analyzed in terms of objectives, practices and success, and each can be viewed in light of its contribution to the overall goals of the park.

An attitude of self-renewal will be the center's hallmark. There will be no room for complacency in any area. Efforts should be continually aimed toward creating new learning techniques, adding new content to the curriculum, and satisfying new demands from the community.

Once the concept of a community park has been developed, it may be subjected to systems analysis -- a technique which has found significant application in business, industrial and military operations. In essence, a total unit is examined and evaluated as a system to determine how effectively it is fulfilling the objectives for which it was designed. This is done by identifying inputs into the system, including the people, goals and materials; determining the processes or interactions which take place, and evaluating the output which is produced.

The computer, with its enormous memory banks and almost instantaneous retrieval, now makes it possible to collect and store for access hugh quantities of data. Student information and records -- from intelligence quotients to college board scores to days absent in the fifth grade -- can now be readily available for analysis.

In addition, there has been an increase in institutional research. Believing that there was inefficiency in some segments of school operation, educators began to study how schools were being run -- average daily attendance, years that a book was used, the number of college-bound students, etc. Today, by storing these facts in a computer, it is possible to research the workings of an institution, compare its record with other schools or a standard, and suggest improvements.

Finally, educators are recognizing that people, materials, facilities and dollars available in the educational realm have finite limits -- and it is impossible to provide all services to everyone at once. Meeting the problem and allocating limited resources in a rational manner require long-range planning. Now, thanks to the growth of computer technology and institutional research studies, this can be undertaken more efficiently.

The two most difficult tasks posed by systems analysis are identifying the goals sought and determining methods for noting, quantitatively, the extent to which they have been reached. Both must be done, however, imperfectly, or the analysis is quite meaningless. The community park's "reason for being" must be delineated and each of the social institutions which it includes must recognize what is required of it as an input to make the park successful.

The core of the park is its educational component. A description of how it may be analyzed as a system (actually it is a subsystem of a comprehensive community park) may lead to increased understanding of systems analysis and the construction of better parks.

Every system must have a mission or purpose for being. The task of the education center is to provide a series of learning activities -- which impart certain knowledge, attitudes and skills and which result in certain forms of behavior - designed to help learners become effective, productive, participating members of our society. Major inputs in this system include the students, instructional staff, physical plant, and financial resources. To a lesser extent, other social agencies, parents, and other factors may prove influential.

Inputs must be thoroughly and painstakingly studied. For each element, data must be gathered to show its present status, how it developed to this point, and what its projected future position will be if the relationship among all variables remains approximately the same. These data are then stored in computer memory banks and recalled when needed.

Inputs then are permitted to interact within the learning setting (sometimes archaicly called the classroom), with the curriculum serving as a catalyst for inducing behavioral change. The student draws upon certain skills already learned, the "arithmetic", and places what he gathers from his learning experiences in his memory, the "storage". Teachers check periodically to see how much has been retained in storage. When a student evidences that a significant quantity of concepts, habits, attitudes and skills which reflect the goals of the center has become a part of his behavior patterns, he is recommended as a graduate or "product". The staff of the center continually recycles information, about the product and the procedures used, in the computer as a form of feedback, thus revising the curriculum and refining the quality of the graduating student. The product and the goals must be compatible.

Throughout the entire analytical process, the motivating factor which gives meaning to the content and directs development of attitudes and skills, is the system's goals. They provide a standard for measuring progress through the system. As Robert Mager says: "If you don't know where you're going, you're liable to end up someplace else!".

Therefore, a systematic analysis of the education center requires:

> A set of goals, as clearly defined and understood as it is possible to make them.
>
> Input elements, or a vast array of data about students, staff, plant and equipment, monetary resources, and the community -- all arranged on tapes which are readily available for the computer.
>
> A matrix of circular activities in which materials and content help the learner to acquire new modes of behavior.
>
> Measurable output in behavioral change induction units which reflect goal attainment in quantitative and qualitative terms.
>
> Evaluative procedures that allow for a study of the product (student) in relation to the goals, one year and more after he has left the system.
>
> A feedback loop to permit the introduction of new practices and new content, acknowledged as a result of studies of goals, process and product.

While the systems approach has much to commend it, it also has limitations which should be recognized. A system can be analyzed and evaluated only in relation to previously determined goals. Results of the analysis may suggest changes in these goals but the original ends and modifications are the responsibility of the user.

If analysts disagree about the goals, there will be little they can agree on concerning the best procedures to follow.

Analyses are no better than the quality and quantity of data supplied. If information is insufficient or inaccurate, results from the computer will be in error to that extent.

A computer can perform only those functions which it is told to perform and it can analyze data only according to the directions fed into it. Its tables of information require human interpretation and its usefulness will be determined by the interpreters' ability to abstract generalizations from the data.

Systems analysis can be a useful tool not only in the study of an education park but in the study of any school unit. One must have necessary data banks and other materials, of course, but these can be obtained, reviewed and used for future projections.

Most important -- don't do long-range planning once and say that it is done. It is a continual process requiring that you sit down every year and plan for the next five or ten years. Goals will have to be modified, processes adjusted and/or the product subjected to further treatment.

As more data are collected and goals are more clearly defined, and as we become more knowledgeable and sophisticated in data reduction and interpretation, we can begin to formulate the essence of a school system or plant which is closer to our heart's desire. Each of us would have a different concept of the school, of course, but each would have one.

By identifying the major variables and parameters, it is possible to construct a model of this plant on a computer. We could then alter any variables we wish and observe what effect the changes would have on the model. By this type of simulation, changes could be attempted and evaluated without actual trial.

In general, this is not yet possible -- not because of computer inability but because educators have not defined their goals with the necessary clarity. Certainly, it appears likely within the next five years.

THE EDUCATION PARK: PROS AND CONS

Address by B. Alden Lillywhite

Recent riots in our major cities, with a large percentage of juveniles participating, have underscored the fact that for urban America, D-Day is today. The time for decision, for commitment to meeting this crisis, no longer can be dealt with tomorrow.

Historically, great cities have been the centers of our wealth and civilization. Today they are fast becoming the jungles of our society -- jungles of contrast, peopled by the childless rich and the child-rich poor.

Caught on this socio-economic treadmill of poverty, unemployment and discrimination, are the cities' schools. With obsolete buildings, uneven standards and little community support, these schools too often train children "for lives of dependency simply because they did not exercise better judgment in their choice of parents". These are the children whose needs for individualized instruction, imaginative curricula and cultural experiences are greatest -- and, often, theirs are the schools least able to meet these needs.

The challenge of creating an alternative to meet the urban child's needs has led to consideration of the education park. To some, the park concept seems a logical step in the school consolidation movement. To others it represents a last-ditch stand to help make cities livable. To some, it threatens to destroy all that is good in the neighborhood schools.

To me the park concept represents one of a number of alternatives for providing economical, integrated, quality education to *ALL* urban students. I emphasize "one of a number" because we do not yet know enough about education parks to compare them with other alternatives. We need to stimulate discussion and investigation in the hope that we can soon say with some certainty what these parks can and cannot accomplish, particularly with ghetto children.

Advocates maintain that the park concept of consolidation will provide to all children the benefits of facilities and highly specialized personnel which could not be afforded in a single school. Others say the concept of consolidation seems too simple to solve the complex problems of urban schools.

Basically the education park is a cluster of schools serving, at several levels of learning, a relatively large number of students from a wide attendance area. It is envisioned as a total educational facility -- with primary, middle and high schools, and colleges grouped on a single large campus and sharing facilities such as auditoriums, language laboratories and gymnasiums. Consolidation of resources could provide quality facilities, services, teaching talents and educational programs with economy, efficiency and equality.

One goal of the park concept is equal educational opportunities for all children but its main thrust must be quality education. The institution which can provide a better educational environment will, among other things, foster integration to achieve equality of opportunity. To obtain this equality, however, improved compensatory services must be offered to the disadvantaged urban child. Merely giving him *as much* as is given to the suburban student will not close the existing gap between the two.

The education park also is seen as a "stabilizing agent", doubling as a cultural, civic and recreational center for the entire community. To achieve this successfully, it must be selectively located -- possibly on the periphery of the city -- to insure a student population from both ghettos and suburban neighborhoods. In the past, this type of mixing has created strong resistance. However, a new institution on neutral ground might negate opposition toward moving from "our school" to "someone else's" school.

A recent survey by the Center for Urban Education revealed that 85 cities in the country, including two in Puerto Rico, are planning some type of education park. Most parks are still in early stages of development. Only 14 were reported to be fully operational and of these, perhaps only two are complete parks which include all grade levels.

The diversity of design emphasizes that the complex must be planned for the individual community, with terminology as well as educational specifications reflecting community values.

However varied their designs, parks will have common elements which necessarily derive from goals of consolidation and integration. Located to serve a large number of children, they should provide excellence and variety in programs and facilities to encourage and stimulate voluntary association among all racial and ethnic groups.

Let's consider some pros and cons of the park concept.

What about the problem of individualization? Will the student, overwhelmed by the park's size, feel lost and anonymous, as park opponents claim he will? Must an increase in the size of the student body necessarily reduce opportunities for individualized instruction? Harold Gores, of Educational Facilities Laboratories, answers: "A school properly organized can be as large as it needs to be and still be sensitive to individuals".

Considerable evidence indicates that a large park clientele generates possibilities for individualized services. Team teaching, large and small group instruction, specialized teaching aids and flexible scheduling all are made feasible by the number of children served. Formerly itinerant special education services could be available constantly in diagnostic and prescriptive units staffed by trained personnel and equipped to provide maximum benefit to each child without removing him from the regular school environment.

Examination of several proposed parks dispels the notion of masses of students of all ages in an educational factory. A "school within a school" organizational pattern can provide self-contained units for various instructional levels, with each having access to shared facilities. Such a pattern can serve both to "humanize" the complex and decentralize administrative functions.

The prospect of sending nursery-age children to a campus school alarms many parents. Some educators advocate maintaining nursery and primary classes in neighborhood schools; upper-elementary students would then enter the park at an age when they could make "more effective use of special services and facilities". Others argue that school experiences among children from various backgrounds must occur during the formative early years if real integration, and attendant changes in values and attitudes, is to be realized.

Some park opponents feel that pursuit of efficiency can distract from the school's function of preserving the sense of community within cities. This limited approach to "community" does not consider that most urban schools have failed to a degree because neighborhoods have failed. We must realize that changes in our society require "new purposes and new means". If city schools are to be viable institutions in the future, they must seek a wider community. Perhaps it is time, as Calvin Gross suggests, for neighborhood schools to give way to school neighborhoods.

The park concept may broaden the community by meeting social, educational and cultural needs of children and adults with a multiplicity of backgrounds. Programs and facilities could help catalyze the renaissance of present urban neighborhoods and possibly temper the tribalism of suburbanites.

With most children completing their school careers in one location, parents would have more opportunity to become acquainted with the park. They also, with other adults, would be more apt to participate in continuing education programs, recreational and organizational activities.

The continuity of the park would offer low-income families increased choice of residence and the wide attendance area could provide a stable classroom situation for children. A study by the University of Chicago has shown a direct relationship between poor academic performance and the number of schools attended.

The Office of Education's Survey of Equal Educational Opportunity showed segregated education to be inferior. Setting quotas and maneuvering students by formulas for "instant integration" has been called "a mechanical device to solve almost instantaneously a human problem". The education park should foster acculturation of multi-ethnic groups to insure assimilation of every child from every school into the mainstream of American life.

Usually the cities' best administrators, teachers and students are either concentrated in a few good schools or sparsely scattered throughout the system. Bringing them together in a park could provide new opportunities for the more talented to help the less skilled. Advanced students might tutor younger children, experienced teachers could conduct in-service training programs and master professionals could work with beginning teachers.

Teachers could exchange ideas with staff members from other levels and other subject areas, facilitating articulation so that education could indeed become a continuous process. A greater variety of instructional materials and supportive services also would be available.

Some park opponents fear the destruction of interschool athletic programs -- but is there any reason why a school must field a single varsity team? The number of outstanding athletes in a park would probably be sufficient for several teams in the same sport. There also would be enough students to provide competitive programs in minor sports, which could well result in better developmental programs for a much larger number of children.

Much of the organized opposition to the education park seems to focus on transportation. Nobody likes busing, it is argued, and schools are not in the transportation business. However, many children already are bused to neighborhood schools as well as to many special school events. Besides, transportation time need not be lost. Audio materials are being developed so that students might listen and learn while in transit. The challenge is to design programs to hold their attention.

Student transportation is inherent in the park concept and busing is expensive but it probably can be justified and accepted if the child is traveling to the best facilities, instructional resources, and educational program we can provide.

There is a reluctance to abandon old school plants although many are incompatible with educational needs of today, not to mention those of tomorrow. Throwing good money after bad buildings will never elevate these schools to the quality envisioned for proposed parks.

The high cost of land in urban areas convinces some opponents that an educational center of the scope outlined here is not feasible. However, the sale of present school sites, some of them very valuable, could not only provide capital for park expenditures but increase tax revenues as well. Funds for projected renovation of old buildings also would be available and, if park planning coincides with urban renewal, a park site might be obtained at a nominal price.

Both construction and maintenance costs of a park might be offset by full-time use of shared facilities. The per capita cost of buildings, equipment and materials is reduced by the larger number of students who may use them. Savings also could be realized on utilities, secretarial support and repair services.

Where sufficient space for a park is not available, interesting architectural solutions are being considered -- layered outdoor space, rooftop playgrounds, highrise buildings, buildings on stilts with play areas underneath, and use of air rights over railroads, highways and water.

As disturbing as the cost in dollars is the cost in time for park construction. Development and implementation usually require several years. If the park proves as segregated and mediocre as present ghetto schools, we shall have lost irreplaceable time for exploring alternatives and our cities may have passed the point where quality, integrated instruction is possible.

For these reasons, the ESEA, Title III program is assisting school districts in conducting feasibility studies of the park concept. Such studies must supplement research and practical experience if the proposed complex is to meet the educational, cultural and recreational needs of the community. To reflect the total community, these needs must be assessed in relation to projected population trends and the problems of city planning, urban renewal and transportation. An experimental park might be the proving ground for evaluating the feasibility of a system-wide adoption of the concept.

The education park, as presented here, seems to offer wide-ranging possibilities for educational excellence -- but excellence will not just happen. Consolidated facilities and large numbers of students from various cultural and ethnic backgrounds are elements in the concept. Quality education is the goal -- and this requires planning and follow-through with adequate support. Without sufficient planning and necessary supportive services, the park could transfer and magnify failures of neighborhood schools into a ghetto institution of gargantuan proportions.

The question is this: What can an education park do better for each child than can other alternatives and at what comparative costs? The answer rests with each community.

The park can provide a framework for continuing educational excellence. Herein lies the promise. On the other hand, it can provide a framework for the stultification of educational development on a scale so large that, once executed, would be very difficult to demolish and begin again. Herein lies the problem.

Both promise and problem must be considered carefully and realistically in terms of community needs. The best educational programs to meet those needs may well include an education park.

Any program *must* include a design that fosters one essential goal: the provision of quality education for every child in our nation -- an education that enables each individual to develop to his optimum capacity as a human being. This goal is the beginning and the end of all our plans.

EDUCATIONAL FACILITIES FOR THE INNER CITY

Address by Harold B. Gores

Inner-city schools and colleges are in trouble, yet compared with 10 years ago they should be better off, not worse. Teachers are now better paid, classes are smaller, new buildings have been constructed. Money has been spent to improve the curriculum, remedial services exist in greater quantity, education starts sooner, lasts longer and there is more of it. Yet despite improvements in all these conventional criteria for excellence, the situation worsens.

What has happened? The student body changed and the neighborhood changed. That was all that changed -- but it is everything.

The educational establishment is not accustomed to dealing with change as fundamental as student bodies and neighborhoods. Its expertise is confined to adjusting, one at a time, to discrete elements of the system: teachers' salaries, class size, revised subject matter and other separate matters, ad infinitum.

For the most part, educational administration, like much of government, is a defense mechanism. It deals with specifics, responds to pressures, adjusts and rectifies -- puts out fires. Until very recently, this was what was wanted. The idea that education should take the initiative in the absence of pressure is rather a new idea and dangerous to any school administrator who acts on it.

Schools are still regarded as maximum security repositories where, in groups, children receive special information enabling them someday to better their lot by moving away.

The city schoolhouse is classically defensive. A masonry fortress afloat on a sea of black-top, surrounded by a chain-link fence and two basketball hoops, it stands there in ceramic hardness, defying the neighborhood to scale its parapets. Within, children are schooled in groups of equal size, in masonry classroom boxes where one teacher for one year leads them through what the central curriculum bureau thinks is good for them and good for America. In upper grades, bells ring children in and out as they swap boxes. This is called "secondary education".

Meanwhile, back at the Bureau for Schoolhouse Construction, various non-reading types who have emerged by force of energy, longevity, and morality to high position, continue to enforce honestly and unswervingly the ancient rules which worked so well during the depression.

That it takes four years in some cities to occupy a school from the day of original commitment is how it is, and to speed the process is to encourage shoddy construction and larceny of the public fisc. Now these are decent dedicated people, loyal soldiers in the chain of command, grinding out the schools they know for a society they knew. If smoke drifts in the window, they close it.

This is the setting: changing student body, changing neighborhoods, unchanging municipal response. What can be done about it?

There are some facts which must be faced.

First of all, inherited law and the ghetto are on a collision course. Traditionally, education is not a function of the federal government nor of the local community; it is a function of state government, and school board members are state officers of local jurisdiction. Local communities are permitted to run their educational systems within certain limits but the state still has the final word.

What is happening? In the inner city where the going is toughest, where disadvantages are greatest, schools are now up for capture. The needs of the ghetto, especially as served by an irrelevant and unresponsive school, have put schools in this position. The desire of the neighborhood to have its own education in its own image and the fact of 326 years of inherited school law are on a collision course -- and you, as educators, are right in the middle.

Second, there is a great power shift to City Hall. Storming City Hall works! Everybody knows if you storm City Hall you get action. Therefore, educational decisions tend increasingly to be made at City Hall. The place for decision-making is not where the law says it is, it's where the pickets put it.

Then, we have a third big new fact -- integration versus apartheid -- and we don't know how it's going to come out. Until fairly recently, everyone thought that integration would make it. Integration may not make it. Let me recount a recent experience I had in a major city (not New York City) which may illustrate what I mean.

The president of one of that city's major universities, which is almost totally surrounded by slums, set up a luncheon meeting for me with three Negro activist members of the neighborhood -- one woman and two men -- all articulate, bright and personally attractive.

"What's the purpose of this meeting?" they asked.

"Well, the purpose is -- tell me like it is," I replied. "I was born and raised in rural and relaxed New England. I'm quite innocent in such matters. I've spent many hours in Bedford-Stuyvesant and I ride through Harlem each morning and night but I really don't know how it is. I'm a late-in-life big-city transplant."

"I'll tell you like it is", said the woman. "In the beginning you (the white community) had oxen who pulled your plows. Then horses were more efficient, so the oxen went. Then *we* became your principal domestic labor force. Now you have machinery so you don't even need us. But here we are. And there is one great difference between us and your other forms of domesticated labor. We can talk".

That was just for openers. Later I asked, "What do you think is the great problem of the moment?"

"You (the white community) have got to understand that most of us want to live together", she said. "We'll always have a few spin-offs, moving out from the central body to some antiseptic suburb, but mostly we want to live together and you've got to stop being frightened by it. If we live together, we want control of our own affairs, including the education of our children."

Toward the end, I asked one of the men what he saw as the solution to the problem.

"Bloody confrontation", he said bluntly. "I am persuaded it is the only solution to this. I know that you people have the money and have the arsenals. Everything is against us, including numbers, but we aren't looking at the arithmetic. We're looking at the history books and someday they will say 'Okay, we tried and we died and we lost -- but we were right' *we're* playing for the history books".

This was an experience, as the educators say. It still leaves me as uncertain as I was before as to what we should do but I think I see more clearly now why people act the way they do and why it is all the more important that in our central cities we move education toward decentralization and re-grouping.

Another thing to consider is that after Vietnam you're going to have money, so you'd better get ready for it. The federal government will have to buttress the economy and education will be one of the principal consumers and employers. We need large plans now just to get ready for the flow of money that will have to come to maintain the economy. I hope this money won't be used simply to multiply the status quo.

What are the urban options?

We must change the definition of the school and build schools not just for children but for people. Governor Rex Lee of American Samoa has said that educating children alone is too slow a social process. It is quite possible that while we are educating the children, the adults will destroy the society their children are being educated to inherit. Teaching both children and adults has special implications for the education park.

We must also get used to the idea that school boards won't have to pay for the whole thing. The day when the typical school is paid for totally out of the school budget is gone. Other agencies of the government must be in on the planning and the paying.

We must abandon old formulas -- forget most of them. Let's stop trying to "square up the site". Remember how we used to love to do that? Instead, on the assumption that schools can be good neighbors, we should maximize the opportunity for people to be neighbors of the school. Let the site become amoeba-shaped, sending tentacles down the streets and increasing the periphery. The little compact school may be the most economical but it won't save people, neighborhoods or cities.

It has been estimated that our "sense of community" encompasses about one square mile. This is the largest area in which a person will take personal action about something he likes or dislikes. If anything happens farther away than one mile, chances of personal intervention are unlikely. We should think of renewing cities, square mile by square mile, and many a downtown educational institution could become the nexus for renewing that square mile.

We must change basic art forms. The island school and the self-contained campus are vestigial remains of an earlier day. If you want to cool it quickly in your cities, *rent* good quality space. Schools have had bad experiences with rental space because we always rent or take over the worst place there is. Try renting the best. It will cost money but what are we trying to do, save money or save cities? Renting facilities can do the job any time we really want to get children out of hovel schools. The real difficulty lies in gaining the support of the people, and people just aren't ready yet. Architectural sketches of schools are photogenic and people will buy them. How do you show renting on television. Nevertheless, renting can be a solution.

In one northern urban area a school is being created in a 20,000 square foot, air conditioned, abandoned supermarket. This is planned to be a school for dropouts and, interestingly enough, it is being designed as though the occupants can be trusted. We have never designed schools around trust. They are designed around custody, protecting society from "the naturally destructive young". Give them formica tops and glazed tile. Lock the students in and defy them to destroy their environment.

This proposed school won't feel like a school and it won't smell like a school -- a mixture of sweat and peanut butter. The student already has failed school and you can't get him back into a regular school, but maybe this place will be the exception. Rooms will be carpeted and furniture will be comfortable. Imagine comfortable furniture in a schoolhouse! There will be floor lamps -- none of this cooking students at a standard rate of so many footcandles from the ceiling as though they were eggs in an incubator. They think they can trust these folks to run their own lighting system. After all, they were smart enough to drop out of irrelevant schools.

Joint occupancy, with schools and other compatible tenants on the same premises, has particular implications for the education park. New York City has plans for about 15 of these joint occupancies right now and one already is under construction.

Don't be professionally ashamed to think of some parts of these central school systems as nomadic -- willing to go out and follow people wherever they go. With shifting population currents within our cities and the necessity for rapid response to inner-city needs, the conversion and renewal of existing structures should be encouraged.

Anything you do about an education park will require organizational rearrangement. One of the cruelest quirks of educational change would be to spend millions of dollars on an education park and then fill it with self-contained classrooms. We must get to the individual.

This will cost money. I don't see an education park saving any money. I do think it is an instrument that holds great promise for improving the quality and relevance of education. I also see it as an important rescue mechanism as we try to save and renew our central cities.

I don't see parks saving money, if only because it costs more to keep track of an individual child than to keep track of a group. Handling children 30 to a box, the way we handle strawberries, is relatively cheap but if you're going to let each child cut his own pathway through the school and curriculum, it's going to cost money. Even so, we must have schools that somehow or other focus on the individual rather than on the standard group.

Teachers will move more and more into counseling relationships with students as technology devises new and varied equipment for dispensing facts. Copying devices now being perfected will soon produce audiovisual instructional materials -- even color and sound films -- inexpensively enough to be supplied at the point of use. Those of you who see the education park in its gargantuan aspects, requiring a great central bank or electronic repository of one sort or another, watch out! There still will be continued use for dial access material but the great hope is that much of this material can be duplicated inexpensively and used where the child is, where the teacher is, where the group is.

What are some of the things we need?

We need demographic studies to supply pertinent information and statistics. New schools are still thought of as solving today's problem without regard to what may happen in that district over the life of the building. In the interest of economy it is critical that city schools be brought to the view that neighborhoods are organic and ever-changing.

We must experiment, wherever possible, with decentralization. We must consolidate small schools. School boards are fine but there are just too many of them. What we need to do is continue consolidation of the small while we decentralize the big. The best arrangement is somewhere near the center.

We must find some orderly way to transfer much of school management from the state school boards to the city school boards, to the neighborhood. We need all kinds of experimentation to find a way; otherwise we will have the collision of law and the demands of the neighborhood.

We ought to try subcontracting to other agencies -- to downtown universities, to the private sector. I'd like to see IBM running one of the toughest schools.

We need to experiment with "instant schools", schools built in one year instead of three or four. We can, if we want them badly enough.

Now let's discuss the education park and its promise.

More than any other suggested new art form in education, the park holds promise of promoting integration. An education park may not have much real meaning unless it has either an integration or a poverty thrust. If it's just going to be a big school, and people think it will save money because it's big, my guess is that it will fail.

We need to encourage consortiums across political boundaries. The suburbs can't sit out this problem. Some of our self-contained little suburbs had better get together to provide services they cannot provide alone simply because they don't have a critical mass of students and teachers.

Education parks offer a fresh start. School districts, like crustaceans, cannot keep growing and growing in their shells. They must shed their old shells and start growing new ones with greater dimensions. Unless the education park is a different place, it, too, will be broken up some day.

Seek a variety of solutions. There won't be any single right answer so be cautious of one model in anything.

Tell people you can remove the financial risk of a large undertaking. One thing that holds up progress in education parks is the cry, "What? Shoot 40 million dollars? This is too much to gamble on a place we have had no experience with. It may not work".

Build the park so that it will be a good place for people no matter what they are doing. In the past we haven't done that. When we abandon a school now, we can't get anything for it but the price of the land minus the cost of razing the building. Design the park so that it can be used for other purposes and the community can recover its equity any time it needs to.

I wish I could close with some definition of the education park. I can't. I am reminded of a statement by Dr. James Conant when he was asked to give a talk on the American high school: "There is no such thing as *the* American high school. There are only American high schools, plural, and they are as plural as our nation, our culture and our subcultures."

Nevertheless, I hope that somehow we can arrive at an agreement about education parks broad enough to take in the variety of communities in America, supportive of the pluralism of our society, relevant to the people and sensitive to the persons.

EDUCATION PARKS: A HAVEN FOR INDEPENDENT LEARNERS

Address by William M. Shanner

I am beginning to see what Polly Adler meant when she said, "A house is not a home". The dilemma which educators are facing today is that a school is not a place for learning.

In the typical group instruction classroom of today, what percentage of class time is a period of effective learning for the student? I would guess ten to fifteen percent -- certainly these are more realistic figures than eighty or ninety percent. Students really spend very little time in active learning. Some learn hardly anything at all and sooner or later become our dropouts or "pushouts".

We know very little about what, or how much, or how efficiently a student learns. If he is learning, is he learning something that will be useful to him in facing the problems of the future -- in his work, in his leisure time, at home?

Is there some hope in the education park of increasing the efficiency of learning? Is there some hope of increasing the relevancy of what is learned? Can education become more worthwhile?

Teachers, facilities, instructional materials are all available to help the student learn but it is he, himself, who ultimately must do the learning. The criterion of all educational and training programs is -- has the student learned? Education parks should be conceived to facilitate learning and evaluated on that same basis.

Let's give learning back to the kids! Initially each preschool child is an independent learner and for the first five years of his life his parents must be considered, in the most precise use of the term, his teachers. Evidence points to these first five years as possibly the most significant years in the life of a child. He discovers how to communicate his needs and desires, he masters the entire sound system of a language, and he acquires a basic knowledge of social behavior -- all as an independent learner.

Viewed in this light, the problems of the "culturally disadvantaged" child become more meaningful. What kind of teachers were his parents? The problems are educational rather than socioeconomic and should be attacked as such. Perhaps the education park could assist parents, since typical neighborhood schools are less capable of coping with these problems in areas where the need is greatest.

Parents could be taught how to teach their preschool children. We have communications with the home through radio, television, and printed materials. Television instruction for parents, even for only an hour a day, could be extremely valuable, particularly if supplementary instructional materials were made available. Such a program might teach children simultaneously, introducing them to pre-reading instruction. If preschoolers could be tested at the education park, their abilities and needs would already be known when they begin formal schooling. The concept of parent education is not new but it remains to be done in some well-regulated and continuous fashion. Perhaps the education park would be equal to the task.

I have two suggestions on how to give learning back to the kids. The first is to improve his learning opportunities during the preschool years and the second is to organize his formal schooling to provide some system of individualized instruction.

A system is simply defined as a complex of elements in mutual interaction. Systems may be either "open" or "closed". An open system is related to and exchanges matter with its environment; a closed system does not. I believe that typical group instruction, in a classroom where the student is largely passive, is more characteristic of a closed system -- and I advocate the open system for education, where the student is active and independent.

An open system exchanges information with its environment. It has inputs and outputs. The need for more information about the student and how he learns is obvious. I think this information can best be acquired in an education park, which broadens the learning environment, rather than in a self-contained classroom and/or neighborhood school where even the best learning environment is restricted.

An open system tends to maintain itself in a steady state, much like the flame of a candle, with a constant ratio maintained among the components of the system. We would hope to help the independent learner attain and maintain a steady state of learning -- based upon a continuous curriculum, behaviorally-stated objectives, supportive learning activities, and his own individual learning style.

An open system is self-regulating. A sudden draft will cause a candle flame to flicker but when the draft stops, the flame regains its normal characteristics. We would expect such a self-regulating component to be a part of the educational system, as an aid to learners who might experience difficulties.

An open system displays equifinality. Identical results can be obtained from different initial conditions. Students with widely differing abilities can master the same behaviorally-stated objectives through different types of learning experiences. In traditional education, the constant is what is taught and the variable is what is learned. The emphasis should be on what is learned and what the student can do as a result of that learning. We can let vary the way he learns, the length of time it takes and other conditions.

An open system maintains its steady state, in part, through the dynamic interplay of subsystems operating as functional processes. Various parts of the system function without persistent conflicts that can neither be resolved nor regulated. Behaviorally-stated objectives, supportive learning activities and programs of evaluation increase in importance as subsystems. The learner must be assigned objectives that he can learn! A candle won't burn in an atmosphere of nitrogen. In typical classrooms today, many students are given assignments which they can't possibly complete successfully. One of our first steps should be to match the assignment to the needs and abilities of the individual child.

An open system maintains its steady state, in part, through feedback -- that portion of the output of a system which is fed back to the input and affects succeeding outputs. We need more feedback on curriculum, objectives and their relationships, scope and sequence and learning activities.

These characteristics of an open system are practically nonexistent in today's typical school organization. They should be an integral part of an education park.

Let us now consider individualized instruction -- which does not mean that a student is isolated while he learns. It means only that the learning tasks assigned to an individual student are appropriate to his particular abilities and needs. He may complete these tasks through independent study or through small and large group activities which may or may not involve a teacher.

There are five essential components in a system of individualized instruction:

1. a comprehensive set of educational objectives.
2. appropriate instructional methods and materials.
3. performance standards or criterion tests.
4. a program which permits the student to become an independent learner.
5. an intensive and extensive teacher-training program.

Educational objectives should be stated in behavioral terms and communicated to the individual student. They must be evaluated, fed back, revised and re-evaluated in a cycle that is built into the system.

Instructional methods and materials must meet specific needs of various types of students. Recognition of individual differences dates back to antiquity; sophisticated measurement of these differences is a development of this century. Initial measurement centered around a student's ability to learn academic subjects and led to the development of general intelligence tests. Although these tests have great values, there was a tendency to misuse test scores and rely on them too heavily. Prior to and during World War II, intensive research revealed that general intelligence is not the only criterion for measuring individual differences. Other factors such as interest, aptitudes, and motivation must also be considered.

Although there are still gaps in our knowledge of the nature of individual differences, our understanding of the learning process is even more incomplete.

It is clear that there are several types of learning; memorizing, grasping concepts, problem-solving and creative thinking. There is some information available regarding both appropriate conditions for each type of learning and individual differences in learning. However, this information is limited and current instructional programs do not make effective use of the little that is known.

Recent studies suggest that students learn well from each other, which would indicate that the character and composition of the student body is, in itself, an instructional resource. Therefore, an unselected student body drawn from a wide geographical area would be considered a better resource than the more homogeneous and restricted student population of a neighborhood school. It seems probable that this student resource combined with a program of individualized instruction offers one of the best means of coping with problems arising from ghetto conditions and/or integration.

Performance standards and criterion tests must be related to behavioral objectives on a one-to-one basis. We have no good measurement of exactly what children do learn in school. Few tests are available which evaluate a student's performance on specific behavioral objectives. Most standardized tests concern themselves with global objectives and report results in terms of group statistics which have little meaning in programs of individualized instruction. The best results are those reported in decision-making terms. Results should suggest whether the student should proceed to the next set of objectives or be recycled to accomplish objectives originally assigned but not yet achieved.

Teaching the student to become an independent learner requires that guidance be administered as a learning activity rather than as a counseling or advising activity. Students should not be told what to do; they should learn what to do. An effective guidance program should assist students to become efficient in planning their lives, making decisions, and taking responsibility for their personal, social and educational development. Considerable progress has been made in developing and trying out procedures in individual planning areas; but much of this work needs to be supplemented by critical research to determine which of various proposed approaches are of most assistance to students in the development of their own plans.

Available information on motivating factors is incomplete but there is evidence that successful accomplishment of a self-iniatiated task provides a student with very effective motivation for continued efforts. Various types of rewards also have proved effective. In helping a student plan a program to attain his goals, substantial attention should be given to problems of scheduling, to determining the nature of the most effective motivating and reinforcing activities, and to determining the optimal frequency of such reinforcers for the individual student.

Two particular technological aids -- instructional media and computers -- also are important in planning an effective educational system. One inadequacy of present programs is their focus on only one medium of communication rather than on a comprehensive instructional program which makes the most effective use of each available type of media. Computers offer assistance by providing information storage and retrieval, scoring services, matching and other types of comparisons, identification of instructional problems, and evaluation of various types of instructional programs in relation to specific individual and specific situations.

The role of teachers will be greatly changed in systems of individualized instruction. Mainly, they will emphasize and facilitate learning on the part of students, which will greatly decrease the teachers' non-instructional classroom activities. Giving directions often takes up as much as two-thirds of a teacher's time.

The transition from a typical self-contained classroom into an individualized instructional program will require intensive and extensive in-service training for teachers. It should be emphasized that the role of the teacher is not to compete with technology but to function in a way that technology cannot. Education, after all, is a human process in which students relate to their social environment, to other students, and to their teachers -- and vice versa.

The current pattern of organization -- a superintendent and his staff plus a number of principals in neighborhood schools -- does not appear to be very successful in solving current problems facing education. Perhaps the education park can offer more efficient administrative organization.

A park can offer considerable freedom and flexibility in establishing relationships among its administrative staff, teachers, students and parents. By creating a new pattern of organization, the park hurdles one of the great obstacles to logical and controllable decentralization and also puts administrators, teachers, and special service personnel in closer contact with one another.

The park, then, may offer a new approach to solving many problems: improving and developing the education of children during their first five or six years of life, applying the techniques of systems analysis to educational problems, developing systems of individualized instruction, and assisting students to become independent learners.

The education park has the means of consolidating personnel and facilities to help combat these problems.

CLIENTELE

Is the established public school system failing to educate children to meet the demands of a constantly changing society?

Neighborhood schools are being charged with numerous failures -- in meeting vocational needs of the student, in assisting the child to realize his potential, in training the handicapped, in helping the maladjusted child, in stimulating community support. The essence of these charges is that neighborhood schools are not adequately serving the communities of which they should be an integral part.

Inequality in staffs, programs and facilities among schools in the same system is one of the major problems. The concept of the education park has resulted from the need to provide equal education opportunities, economically, to every child.

How will the park accomplish this objective? What features does it have that will make quality education more feasible? How will the park better serve each child? How will the park meet community needs better than neighborhood schools do now?

In attempting to answer these questions, clientele panelists sometimes disagreed on methods but rarely on objectives.

Quality Control

Unified administration in the education park will make it easier to control the quality of education which each child receives, most panelists agreed. Since a high school normally draws from a larger attendance area than an elementary school, students entering a secondary school have all had different learning experiences -- the quality dependent upon the quality of the elementary schools which they attended. One participant cited a study conducted in New York City which examined the best features of twenty-two schools and incorporated them into one hypothetical "best" school. The level of education which this imaginary school could provide did not nearly approximate that which could be available in a well-conceived education park, she said.

Quality education also would be enhanced by the stabilizing element inherent in the park's geographic location. Since the park would encompass a large attendance area, the urban child (for the first time, in many instances) could complete his education at the same school. No longer would he be forced, every time his family moved within the city, to adjust to a new school with new teachers and new methods.

Socio-Economic-Ethnic Mix

Integration -- racial, ethnic and socio-economic -- is desirable in all education parks and necessary in those areas where great differences exist among these groups.

Some urban children, especially those in ghettos, view their total environment as nothing more than a bleak dead-end of crumbling tenements, crime and poverty. The wealthy or middle-class child is unaware that all do not share his advantages. What results? The perpetuation of misunderstanding between groups of different backgrounds and the further alienation of some groups from society.

How can we now impose societal values upon children who feel that they are not a part of society? In the ghetto the accepted value may be: "The only fault in stealing is getting caught". Bringing children from all levels together in one place increases the chances for having the disadvantaged accept society's standard of conduct. These standards will no longer be those of the remote middle class but the values of a group to which these children belong.

Fostering pride in cultural heritage is essential to the well-being of the individual as well as to the unity of society but promoting "tribalism" in any segment of society is self-destructive.

One participant noted that in some places not only whites but middle-class Negroes are fleeing the cities, leaving behind only the most disadvantaged of all races. Some suburbs, recognizing that inner-city schools are becoming problems that ultimately will affect everyone, are opening their doors through busing. However, there still are inferior city schools with children in them. Moreover, children who are bused still must return nightly to the city and its problems.

"I am not so sure that by removing the more aggressive, more talented children from city schools -- and since busing is voluntary, it is usually these children who volunteer - we are not doing more harm than good", this participant added.

The only means of insuring quality education for all children is to get good schools into the city. Maybe the education park can accomplish this.

Student Identity

The size of the park has been termed a drawback by some critics who fear that the student's sense of self-identity will be destroyed. Will large numbers of children make teacher-pupil contact less likely? Will individualized instruction, in which a child paces himself, make social contact less likely?

One panelist reported that a class of twenty-five children in a typical New York City school was observed to determine how many times during one week the teacher addressed a student by name. During that week only one-third of the class was so identified and these were the very bright students and the troublemakers -- the ones who always attract a teacher's attention.

On the other hand, when conference participants toured Nova High School at South Florida Education Center, Fort Lauderdale, their student guide reported that although students work individually, each reports to his teacher at least three times weekly. During these conferences, students and teachers discuss the student's progress, problems and interests. Numbers, then, apparently have little to do with the student self-identity problem. If classes within the park are well-organized, parks could actually make student-teacher contact easier.

Conferees also brought out two other related points. The park must provide for adequate space, as it relates to movement, so that individual students will not feel lost in the crush of vast numbers. In addition, the student population should be organized into modules, with park facilities and programs planned to handle these modules individually and in multiples. Such an arrangement would foster the student's identity with a group and insure the most economical operation of programs.

Services

Unlike neighborhood schools, the park can provide the services of all manner of specialists -- social workers, psychologists, psychiatrists, master teachers, and many others. For the child who is handicapped -- emotionally, physically or mentally -- the park will be a boon. This type of child can be identified earlier and can receive treatment at the park, in a familiar environment. He would not be tagged "different" but would simply be a child at school, receiving one of the many services available.

Handicapped children can more readily be fused into the regular classroom situation in a park. For example, a "crisis teacher" could be hired to work with emotionally disturbed children at the park, while they attend regular classes. Children who have emotional explosions do not do any better when removed from class; removal merely emphasizes their problem to them and to their peers. Most neighborhood schools, however, cannot afford the "luxury" of such a teacher.

Opportunities also are increased for the exceptional or intellectually talented child. A wide range of facilities will enable him to delve deeper into areas of interest, and individualized instruction will permit him to go beyond what is required.

The park also can more fully utilize advanced technology in education. Computers, television, individual study carrels with taped audio-visual programs can be available to every child. More sophisticated machinery and equipment can also improve vocational education programs. How many vocational students culminate their program now by making book ends? True vocational education will equip them to enter the skilled labor market when they leave school.

In-service Teacher Programs

In addition to better serving the student, the park will better serve the teacher. The proximity of teachers of different age groups and experience provides greater opportunities for communication. Master teachers can also conduct in-service training programs for the less experienced.

Conferees stressed the importance of making teachers feel "secure" in the new park atmosphere. Many good projects and innovative plans have been killed by an insecure staff who felt threatened by changes not clearly understood. Imaginative teacher training and retraining programs -- including a thorough orientation in park philosophy -- is a must, during both planning and operational stages of the park. Teachers who feel they cannot adjust to the change should not become a part of the park staff. If instructional personnel try to perpetuate "more of the same" and do nothing more than is now being done, the park will fail.

Experimental patterns of organization in the park will provide various career opportunities. Many different types of teachers will be required -- specialists, master teachers, crisis teachers. The resulting occupational promotion ladder should, in itself, be an inducement for teachers to join the park staff.

Community Support

The community is not merely served by the park -- the community *is* the park. If those actively involved in park planning -- educators, social workers, psychologists, architects and demographers -- by-pass the community, they will, in effect, by-pass the park concept.

For the park to be effectively responsive to the community, a direct line to citizens' groups, business, industry and cultural institutions must be established. This concern led conferees to unanimously recommend: "To assure that the parks will fulfill the community's needs as the community perceives them, thereby assuring success, all planning should be made with representation from the total community, including teachers and students. The total community should later be involved in the park's administration".

Meetings with community groups, which later offered some valid recommendations, turned initial protest into avid interest in a park proposed for Washington, D. C., one panelist noted. Another added that school boards, often overlooked as means of communication, should be utilized to enlist park support from other government boards and agencies.

Where possible, affiliation of parks with universities or other unique institutions in the community should be considered, conferees agreed. University facilities, faculties and other resources would then be available to the park; student teachers and broad in-service training programs could be utilized; and university cultural activities involving musicians, artists and actors would all be available to park clientele. In fact, these various elements would function as a part of the park.

Community business and industry also should be carefully surveyed for possible contributions to the park. Both already spend huge sums of money on educational programs for their employees. Why not cooperate and take advantage of some of them? Some parks are being constructed to include shopping centers, light industry and business offices. Where possible, this kind of design should be explored as a means of drawing the community into the park and taking advantages of services it might contribute.

Community Services

It is one thing to speak of the community school and another to speak of the school community. Although quality education for school-age children is its main objective, the park should serve all age groups and provide a variety of programs to draw the community to the school.

Art shows, plays and other cultural events should be a part of park activities. Not only adult education courses but preschool programs should be planned, permitting young children to receive "Headstart", diagnostic and remedial services before they begin formal schooling.

Community recognition should be built into the park at every point. Senior citizens with experience in specific areas could conduct courses for children and adults. Community meetings could be scheduled on park premises.

The human element should never be forgotten. Baby-sitting services should be offered so that young mothers can take advantage of park programs. The park staff should include one or more persons to publicize available services and direct individuals to them. Extension programs should be devised to "take the park to the people if the people can't come to the park".

At the concluding session, one participant cited the frequent use of the term "unique" in relation to education parks.

"Unique means singular, one of a kind, and this is not what we are talking about here", he said. "Most of the things we have mentioned could ideally be done in any school but the problem is that they are not. The size of the education park and its climate make a better education more likely to happen, but it does not necessarily follow that it will".

"What happens in the park will only happen if we make it happen", another added. "In a park it is possible to avoid the variations present in neighborhood schools and exercise quality control. We could also have greater opportunities for communication, realize greater efficiencies in many areas and, because of the park size, do many things an individual school cannot do. But, I repeat, nothing will happen if we don't make it happen".

Over the next decade, ninety-nine percent of our public schools will not be education parks. However, if established parks can demonstrate their superiority in providing quality education, economically, the park concept may be widely adopted in urban, suburban and rural areas. It is up to the educational community to see that parks live up to their expectations.

In the last analysis, the park is people -- the preschooler, the school-age child, the adult. It is the total community. Everything else is a component. "People" are the catalyst which will set all the components into effective motion. If the catalyst is missing, the park will remain sterile.

CURRICULUM AND INSTRUCTION

Teaching the ABC's, or even the Three R's, isn't enough any more. School curricula that concentrate only on a few letters of the alphabet are obsolete. Students need to learn as much as they can about everything from A through Z if they are to become effective members of today's complex society.

Exactly how this can be accomplished, however, brought forth a multitude of opinions from workshop personnel -- so many, that one participant commented wryly at the concluding session, "We are still confused but we are confused on a higher level".

Nevertheless, panelists did make pertinent observations on curriculum development and implementation in an education park.

No one park can be designed as a model for all others. Each necessarily must be unique because of its geographical location, the varied backgrounds of its students, varying degrees of traditional orientation and commitment to park philosophy, and basic concept -- as an institution limited to education or a more comprehensive community plaza. These factors also presuppose a curriculum unique to each park.

The education park can make possible a more thorough and systematic approach to curriculum planning and procedures. With a larger and more diversified staff to handle the many tasks involved, there are greater opportunities to exchange ideas, import and coordinate resources and materials, and set up flexible scheduling. The park has the advantage of greater quantity and quality in its personnel, content offerings, materials and facilities and equipment.

Instructional Personnel

Panelists agreed that teachers should be deeply involved in curriculum development. The park makes possible a "task force" approach, with teachers, supervisors and content specialists working together to solve both general and specific problems.

The park has a unique opportunity to bring together not only buildings but human resources which can be shared. It permits expansion of both professional and paraprofessional staffs and also draws on the expertise of individuals from business, industry and the community at large.

Utilizing paraprofessionals such as clerical aides, technicians, and teacher aides will give teachers more time for planning and conferences and also will permit deployment of the teaching staff for optimum effectiveness. There are many teaching functions within the park -- lecturing, team teaching, working with individuals and/or small groups, supervising diagnostic procedures, specializing in certain areas, serving as a master teacher. Why not let each teacher perform the job he does best?

The proximity of various schools within the park would permit personnel to function more efficiently. Supervisors and content specialists could work with teachers at all levels to coordinate learning activities and achieve a high degree of articulation. It also would be possible to exchange or rotate the instructional staff among various levels, giving both elementary and secondary teachers an opportunity to "see how the other half lives". Such experiences could provide valuable insights and prove beneficial and enriching to both teachers and students.

Content Organization

Panelists stressed that curriculum content should be organized with relevance and articulation -- two terms which several participants thought should be defined more clearly.

"Relevance" was never defined to the complete satisfaction of a few panelists but the majority agreed that it was a general term encompassing several factors of equal importance.

Relevance implies a wide variety of content which deals with current problems, reflects the need of the park community (urban, suburban, rural) and gives students a greater choice of courses. The park can provide this variety.

A relevant curriculum includes basic minimum essentials and provides advanced courses for in-depth studies but also offers new learning experiences to develop saleable skills, i.e., on-the-job training. Most schools have recognized that no one course of study can adequately serve both college-bound and terminal students and have tried to plan programs to accommodate both groups. Often, however, limited resources restrict these programs. The park not only would have sufficient resources but its large enrollment would provide enough students to warrant advanced and specialized classes in a number of areas. In addition, cooperation and coordination with business and industry within the community could result in student training-employment opportunities on an unprecedented scale.

There must be gradations within the content itself to make it relevant to students with varying capabilities and backgrounds. Many subjects can be approached in several ways. Physics, for example, can be taught using PSSC, Harvard, or traditional materials. In a park it is possible to provide all three courses and let each student take his choice according to his own particular interests and needs. Not just one set of materials but multiple can be offered. in every subject area.

"If a student isn't doing well in one reading program, put him into another one. Keep moving him until he finds one which he can handle successfully and then work on raising his achievement level", said one participant.

"Make certain the content is couched in a language that students can understand and relate to", added another. "Don't teach ghetto children with materials that tell about Dick and Jane down on the farm. They won't know what you're talking about".

"Articulation" applies to both content and methodology and refers to a coordinated sequence of learning experiences for each child, with an emphasis on the relationship of various subjects. This is the very essence of the park curriculum.

Furthermore, several panelists pointed out, the park could achieve this definition of articulation by promoting a second definition, "clear expression", as it relates to conversation among teachers at various levels.

Teachers would have greater opportunities to become more articulate with one another, whether they are discussing the curriculum or the progress of one particular child. A seventh-grade teacher could talk to a sixth-grade teacher, for example. This is rarely possible now, noted one panelist.

Participants stressed that equal emphasis should be given to the process of learning as well as to the content. Children should "learn how to learn".

"Students should not be permitted nor expected to just sit and listen. The content should allow them to have process experiences. It should make them act and react", said one conferee. "In science it is sometimes as important to perform an experiment as it is to come up with the results. *THE PROCESS IS AS IMPORTANT AS THE PRODUCT*".

Facilities and Equipment

Superior facilities and equipment cannot guarantee a good instructional program but they can be an important asset, playing a vital role in curriculum implementation.

In the development of an education park, planning and organization of the curriculum comes first! Facilities and equipment can then be tailored to meet curriculum requirements. One of the prime objections to traditional schools is that, too often, the instructional program must conform to the facilities. It should be the other way around.

Park facilities can have built-in flexibility to provide space for large and small group instruction and independent study. Specialized facilities -- resource centers, science laboratories, language laboratories, technical science shops, business education centers -- can be furnished with the most sophisticated equipment obtainable.

In a park, such items as computers, television, tapes, films, dial access retrieval systems, overhead projectors, microfilm machines and other technological aids can be made available. Tools for learning must be as varied as curriculum content. Methodology must also offer choices to each student.

Any discussion of education park equipment eventually focuses on computers. In a park, which serves a large student population, these electronic wizards are indispensable. Their capability in handling tedious administrative chores -- record keeping, grading, scheduling -- is undeniable but their potential as instructional aids is almost unbelievable.

Computer-assisted instruction is revolutionizing teaching techniques. Computers featuring immediate feedback offer two-way communication with students -- via television, audio transmission and teletype -- and can "stand in" for instructors by taking over routine teaching chores, such as drill.

Highly sophisticated models can be programmed to go a step further. Computer programs, offering multiple-choice questions, not only can differentiate between "correct" and "incorrect" but can even determine the degree of error in an incorrect answer.

In addition to storing data on students, computers can keep track of learning experiences which have proved successful and predict alternative instructional paths for individual students.

"Computers actually allow us to get to know a child better. They really humanize instruction, rather than dehumanizing it", one participant commented.

Individualized Instruction

Basic to the park curriculum is individualized instruction coupled with continuous progress by the student. A very few schools already have introduced these features into their programs and others are planning to do so. However, limited resources in most neighborhood schools hamper these efforts. The fullest potential of this highly personalized form of instruction probably can best be realized in the education park because its subsystems -- personnel, curriculum, facilities and equipment -- are superior.

A program of individualized instruction simply recognizes that no two students are alike. All have different backgrounds, personalities, interests, capabilities and motivations. Trying to establish a single standard for everyone usually results in mediocrity. The slow learner never quite catches up; the fast learner spends most of his time fighting boredom; actual benefits to the "average" student, for whom the program supposedly is geared, are highly speculative.

Contrast this to a system where every child who enters is analyzed to determine "where he is". A battery of diagnostic tests reveals his aptitudes, achievements and potential and helps to identify his personal attitudes and learning style. Once the diagnosis is made, a course of instruction is prescribed for him, taking into account all of these individual characteristics. Learning experiences are then selected for him, with content and methodology suited to his particular interests and needs. Continuous evaluation determines whether the prescription for learning is correct and if and when it should be changed. This combination of diagnosis, prescription and evaluation is the essence of individualized instruction.

The mechanics of this procedure may seem formidable but could be handled with relative ease in an education park, with computers to store, synthesize and analyze great quantities of information.

Continuous progress is merely an extension of individualized instruction which permits each student to work at his own pace. The curriculum is organized in a series of achievement levels rather than by grades. At each level, in each subject, the student receives a "package" of learning activities requiring mastery of certain basic skills but also offering a wide variety of related activities. When a student masters one achievement level, he moves to the next. The progress of the student next to him has no relationship to his own advancement.

Flexible Scheduling

The education park can provide greater depth and breadth in instructional organization as long as scheduling is sufficiently flexible. Variety in content and methodology is useless unless each student can participate in activities and experiences which are recommended and desired.

There should be time for each student to benefit from tutorial assistance, independent study, team teaching, small and large group experiences and various technological aids. Students also should be given an active part in planning and evaluating their own goals and they should be made to realize that personal responsibility is the key to individual accomplishment.

Panelists were unanimous in agreeing that education parks will need more specific definitions of behavioral goals for each student. How does he, and how should he, respond to: using resources, exhibiting responsibility, contributing to and drawing from the social mix, making decisions about his curriculum and evaluating his own progress.

These factors are important from a social as well as an educational aspect. Some panelists feared that students coming from the intimacy and familiarity of neighborhood schools might experience difficulty in relating to the park. Others pointed out that the park could be organized in a manner which would allow students to retain their individuality and sense of security.

At the concluding session, panelists remained sharply divided on the education park's responsibility for total social change. Some felt the park should provide comprehensive community services, while others insisted its responsibility should be limited to education.

All emphasized that they were neither defending nor attacking the park concept. They stressed a vital need for thorough investigation of all aspects, both positive and negative, with objective evaluations to determine whether a park is wanted or needed in any specific area.

FACILITIES

There can be but one message to people who will plan future education parks: the rule is diversity.

No stock plans, no universal site arrangements nor building designs can guide those who must create facilities to house this new and, hopefully, promising approach to education.

The park is and will be different things to different communities according to their individual needs and problems -- educational, social, geographic, economic and cultural. Physical arrangements -- real estate, bricks and mortar -- needed to house them will differ accordingly.

This conclusion must be drawn from discussions by educators, administrators and architects who examined the education park as a physical facility.

Panelists did, however, set forth certain common denominators as guidelines for plant planning. Most important of these, and a seeming contradiction, is the very fact of diversity.

To illustrate: despite prolonged discussion, the panel was unable to set either minimum or maximum limits for education park enrollments. One participant noted, in summary: "We have heard numbers as large as thirty-five thousand from New York City but four thousand might apply in smaller cities and four hundred might apply in the Rocky Mountains".

This same kind of diversity was apparent in discussion of park locations, grade organizations, administrative arrangements, commitments to non-educational community services, self-contained versus dispersed sites, ad infinitum.

It is clear that these and many other fundamental questions about the character of the education park will have to be resolved by each community. Architects and experienced facilities planners stated unequivocally in their final report:

"The planning process (for the education park) must involve a planning team that is interdisciplinary, interagency, and (referring to educational systems) intra-agency. It must involve not only educators, education planners and architects but such diverse personnel as psychologists, city (or community) planners, sociologists, economists, demographers, teachers, community representatives, and even the ultimate clientele, student representatives".

Certain planning considerations must be resolved when the physical form of an education park is being designed. Significantly, panelists chose not to rank these factors in order of importance.

"There are no priorities", commented one. "All of these considerations are necessary to the planning process".

Accordingly, these elements are presented more or less in the sequence which a planning team might follow.

What Is The Park?

As a logical starting point, there must be a clear definition of the park's objectives and functions. What will be the clientele -- will the park serve children only or will it also serve adults? What programs are needed to serve the clientele -- will they be limited to education or will other community services be provided? Not surprisingly, panelists from different communities expressed different ideas.

All agreed, however, that the park would be larger than existing schools in the community and would serve a socio-economic mix of clients. Most felt the mix also should be racial -- that desegregation and eventually integration is a prime, if not *the* prime objective of the park. The majority viewpoint was summed up by one participant who asked, "Is there another compelling thrust for the park?".

Others pointed out, however, that integration was not a factor in some communities. In Washington, D. C., it was noted, public schools are ninety-three percent Negro, precluding any significant racial integration within the system.

There also was disagreement about the age group to be served by the park, and consequently the educational organization involved. Some felt a park, if so designated, must include kindergarten or first grade through 12th or 14th grades. Others questioned any possible inherent advantages in locating secondary and elementary schools on the same site. One participant noted that the school system in Syracuse, N. Y., is planning a series of parks to serve only elementary grades.

There was a unanimity on one objective: the education park must offer an educational program far superior to that provided by the existing school system. In addition, new programs -- whether they involve team teaching, non-graded instruction, independent study, extensive use of mechanical aids, or other innovative approaches -- will have great import on the design of park facilities.

Identifying park objectives, functions and programs requires careful study of the community, its population, and the problems and needs of potential clientele. Demographers are needed to project the number of persons to be served both initially and during the forseeable future. Demographic studies would help to determine the park's initial size and future expansion or, if population declines were forecast, future shrinkages in facilities requirements. Similarly, social scientists and educators on the planning team would help to determine the age groups to be served, programs to serve them, and necessary facilities.

Where Is The Park?

These same experts would be needed to decide another crucial question -- where should the park (or parks) be located?

Initially, panelists tended to stress a central location which would provide a maximum opportunity to serve a mixed clientele but it soon became apparent that site selection poses far more complex problems.

The question of transportation was raised. One participant deemed it essential to locate the park near existing or projected transportation systems, such as rapid-transit lines and expressways, to provide easy access for a large clientele. Another cited a study in Washington, D. C., to locate a series of parks along an existing railroad line, which would be converted to a rapid-transit system. This would permit parks to offer specialized programs and draw students from other parks or even communities outside Washington.

This latter suggestion raised the possibility that central park locations might not be advantageous in some cities. One panelist cited a proposal in Chicago to locate parks on the periphery of the city, near commuter transit lines. Students could travel to the parks, using the transit system, while commuters moved the other way to downtown jobs.

A number of participants suggested that such peripheral locations might encourage cooperation with suburban school districts. In cities where pupils already are being bused to suburban schools, peripheral parks could attract pupils from both urban and suburban areas.

Central and peripheral, the panel agreed, park sites must be chosen with community attitudes in mind and efforts should be made to minimize inconvenience to tenants who must be relocated after a site is selected.

Several panelists questioned whether a single monolithic site is needed for an education park. One school planning specialist from Philadelphia noted that his city is studying a plan to create a six thousand student high school without erecting a single building. The school would utilize facilities and specialized programs of a series of existing buildings -- museums, libraries, a scientific institute and government offices -- located along a six-block stretch of the Benjamin Franklin Parkway.

A conferee from New York City cited the plan for a Linear City in Brooklyn. This proposal envisions a five-mile-long complex -- built on air rights over an expressway and a railroad line -- in which education facilities would be interspersed with residential, commercial, cultural, governmental and industrial facilities.

(Several panelists disagreed with these suggestions, saying that the Philadelphia and Linear City plans should be considered as education "complexes", not as parks.)

Parks and Their Functions

The mix of functions and facilities proposed for Linear City was echoed later in discussions on types of services to be provided in a park and facilities needed to house them.

Obviously, the park will include instructional, resource (library), and study facilities adequate for educational programs; probably it will include such auxiliary facilities as auditoriums, gymnasiums, swimming pools, cafeterias and administrative offices.

However, the panel consensus seemed to be that the park must serve more than a school-age clientele, that it must educate parents as it works with their children, and that it must concern itself with re-education and retraining of adults, particularly the poor.

Many conferees suggested that the park be a community facility, providing or accommodating other services such as recreation, culture, welfare, employment and health and perhaps even including commercial services. If it is to be successful, one participant argued, the park must be attractive to its clientele. He urged park planners to study the way people live in the city and then develop facilities and services which would bring them into the park.

Why not build a laundromat next to a teaching facility so that neighborhood mothers can watch their children learn while the family wash is being whitened and brightened? Perhaps food service for the park could be contracted to a commercial restaurant operator who would set up a variety of eating establishments in the park and hire and train students and residents to staff them.

One participant suggested that living quarters for janitors be provided in the park to reduce vandalism. He also reported on proposals in St. Paul, Minn., that parks include residences for adolescents whose home conditions are undesirable.

Suggestions that service, commercial and residential facilities be included in the park raised the possibility of joint occupancy. The combination of educational and other facilities in the same building or complex could help defray capital costs of creating a park and also represent a step toward the total community planning represented by Linear City.

Park Design

Whatever the functions and organizations of a projected park, one design consideration seems to be universal: facilities built today to house a park (or any other educational institution) must be flexible and adaptable to an unknown future.

Almost equally important, facilities must be designed with the human being in mind, with an emphasis on an environment of trust and respect rather than institutional indestructibility.

A Los Angeles architect maintained that the School Construction Systems Development (SCSD) project has demonstrated that adaptability can be built into educational facilities without paying a heavy financial premium and without sacrificing architectural freedom and variety.

SCSD, supported by the Educational Facilities Laboratories, developed a system of modular, pre-engineered components for school construction. These components -- structure, ceiling-lighting, heating-ventilating-air conditioning, and interior partitions -- are compatible to each other and designed to permit easy and economical rearrangement of spaces within the completed building. Economies of mass production made it possible to build SCSD project schools within a state-imposed ceiling on square-foot costs for construction.

"For the same dollars", the architect concluded, "we built much higher-quality facilities".

Even greater possibilities for systems construction lie ahead, another participant added, noting that a number of new systems are under development in several United States and Canadian cities. These components ultimately could offer architects everywhere almost unlimited alternatives in designing educational buildings adaptable to change and distinctive in design.

Design distinction, panelists agreed, is crucial in education park planning, particularly since the contemplated large student population carries a threat of individual loss of identity.

The answer, said one architect, is a "varied atmosphere" in both architecture and interior arrangements of buildings and in the treatment of spaces between buildings.

Within buildings, new educational programs would call for a wide variety of arrangements, from large wall-less zones of space to study carrels or other spaces for individual work.

Design should be more concerned with esthetics than with security, the group agreed. Rather than ceramic tile and institutional colors, the call was for warmth and color in selection of materials and treatment of surfaces. Carpeting is preferable to bare floors; furniture should be comfortable rather than indestructible.

Given careful design, these amenities need not cost substantially more than standard school facilities and possibly could be obtained for the same cost, panelists said.

In addition, they noted, facilities designed around this "environment of respect" would always be salvable. If the park were abandoned for any reason, these facilities -- unlike traditional school buildings -- would find a ready market among potential buyers.

This salvability of facilities would help to meet another requirement for park planning: the need to design for expansion to meet growth in the park's clientele, or for contraction in the event of population shrinkages.

There are roadblocks to these design approaches, however. Among them are state and local regulations, building codes and labor practices that would have to be changed before systems construction could be adopted in many places and before some of the newer space arrangements could be tried.

Parks As A Capital Investment

There also is the obvious roadblock of economics. How can cities, already strapped for capital resources, finance park construction -- and how can planning and architectural decisions help overcome financial hurdles?

Initial speculation centered upon economies in the very scale of the park, since many of its large facilities would be shared by several schools. As discussion progressed, however, it became apparent that the total square footage of floor space required could not be significantly reduced and might, in fact, be increased.

Panelists concluded that initial capital outlay for parks could be greater than for an equivalent amount of conventional school construction. Observation: "It's going to cost more". Reaction: "It's going to be better".

Panelists did suggest possible long-term economies. Such shared facilities as auditoriums and gymnasiums would be much better utilized than equivalent spaces in conventional schools and, if used by the community as well, higher initial outlays would be even more justified.

Other planning considerations might decrease capital costs. Joint occupancy, mentioned earlier, is one. Another is the possibility of reducing site costs by utilizing air rights over expressways, railroad yards, piers, even city streets. In some cases, existing schools, commercial and industrial buildings might be remodeled into park facilities at considerable savings over new construction.

Facilities And The Park Concept

Facilities alone cannot insure the success of an education park. Prime considerations are clientele and teachers; then, programs and the curriculum, materials and equipment needed to implement them; finally, physical facilities to house them.

The park's facilities, depending upon how well they are planned and designed, can stimulate or inhibit, permit or prohibit. They can create an environment conducive to success or one that is conducive to failure. To that extent they play a crucial role in the future of the education park.

FISCAL

Discussing financial implication of the education park can be a frustrating experience. In nearly every instance, questions outnumber answers.

What is the education park concept? Is it a multi-grade one-site facility of gargantuan size, designed to mix the races of an economically downtrodden inner city? Is it a series of giant high schools, the result of consolidation, with economies of shared services the only goal? Is it fourteen-hundred students in a single house-plan building embracing K-12 and housing the total enrollment of an affluent suburban district?

Or -- is it a new educationally-oriented social institution which, through intergovernmental cooperation, provides such ancillary services as health, welfare, cultural, judicial and protective to a large diverse clientele?

If the latter, the education park exists only as an idea; a possible solution to the nation's urban complexities, a novel approach to consolidation in less populated areas.

It is assumed that the new institutional pattern offers a reliable base for some imaginative approaches to education, heretofore neglected by traditional consolidation efforts. Still, the parameters of any fiscal considerations must range from simple consolidation to the wider spectrum requiring a new institution.

For the traditional concept, present budgetary solutions suffice. However, the social institution requires a bold new approach to fiscal planning, a revision of the orientation to education of the public and private sectors of our society.

Governmental Implications

Reorientation to the structures of fiscal planning incorporates much more than public education. It involves other agencies within the same government and/or agencies of other governments. The ramifications of such bureaucracy cannot go unnoticed. Any new institution may require a new structure of government to provide financing.

This reasoning is obvious. Efforts to provide health, welfare and other social services implies intergovernmental and intragovernmental orientation on a scale which does not exist. This cannot be left to chance. In the past, cooperative efforts cutting across multiple governmental agencies have had questionable success. Experiences of the U. S. Office of Economic Opportunity demonstrate a case in point. Even where cooperation has existed, it has been too slow, tending to deny urgency of the problems prompting consideration.

Coping with this problem may require superimposing a cooperative or statutory governmental agency over other governments or agencies within governments. Examples, on a lesser scale, exist in states where one or two districts provide elementary education; another, the high school with separate feeder elementary schools; and a third which provides middle school facilities for both systems.

Any difference here would involve the addition of ancillary services necessitated by the socio-economic conditions of the area to be served. The education park agency, or authority, would be totally responsible for welfare, health, judicial, protective and other services, including financing. On the other hand, incentive grants permitting subcontracting of services might bring about the necessary cooperation from social agencies and prevent any chance arrangements. In any case, a study of the intergovernmental and intragovernmental considerations, and financial implications, is a necessity.

Financial Resources

Such considerations bring about fear of the education park and its many ramifications, not to mention financial problems involved. This, in part, comes from the assumption that parks will take many forms and shapes. Grants should be made available for economic feasibility studies in specific situations so that these fears can be eliminated.

The task then becomes one of taking advantage of every possible financial resources, an undertaking that requires educators to work closely with community and private enterprise.

Whether by prompting from schools or by its own volition, the private sector of the nation is rapidly developing a variety of programs which could be incorporated into a new social institution. It appears that the education park can better utilize these resources than the traditional organization can.

Consideration must be given to the employment of the services and facilities of the private sector. Who is to say that school districts must build their own facilities? Maybe it would be cheaper to lease from private business, with resultant tax advantages to industry. This may have greater implication in the inner city. There still are fears that the education park may become a ghetto monstrosity, failing to achieve any degree of integration. With private sector involvement and flexible facilities, the building could be turned back to the lessor at any time. Only minimum rearrangement would be needed to turn the unsuccessful school into business or industrial space.

This brings us to another question. Is the education park to be an addition to the present school system or will it involve reorganization of the system, resulting in abandonment of numerous school sites and facilities? The latter can represent a significant loss in capital outlay if alternate uses for this capital investment are not found. Can these spaces be returned to the public tax rolls? Can they be converted to other public or private use, as could buildings designed for flexibility? Studies must be conducted in specific situations to find these answers. Results of these investigations, in some instances, may key the decision to follow the education park concept.

Once hypothetical questions are answered, more practical problems arise. Traditional financing methods will still be necessary but they will require greater allocations than those presently available -- and sources of revenue for public services are not infinite.

Education is steadily increasing in relative importance to other public functions but there has been no significant change in the relative allocation of funds to these functions. There must be.

Local and state sources of revenue are generally proving inadequate to support educational programs necessary to cope with today's problems. It has been said that local contributions have decreased although local effort has continued to rise. State support has remained about the same; federal support is really just beginning. There is a possibility that the state could provide greater financial help to education. It is a certainty, however, that the federal government has no choice other than to become more involved in school financing.

Budget Considerations

After generalizing about the new social institution and its financial implications, it becomes increasingly apparent that current budgetary and accounting systems are not adequate. Program-cost relationships, cost-quality controls, and so on, are not available for effective decision-making. These elements must be developed to meet the needs of the changing institutional relationship.

Data processing equipment will be necessary to the development of adequate fiscal controls projected by this new concept. Techniques of simulation should be applied to find the financial implications of various park models. Such fiscal programs must be developed.

These considerations do not include many specifics previously discussed. Will the education park save money? It is doubtful, and economy should not be the sole consideration for such an undertaking.

There are many questions yet unanswered concerning a park of large scope. Are there economies because of size? If so, will they balance the probable complexities? Will greater space utilization, often eliminating duplication, provide economies through shared facilities? There will be construction economies in rural areas but what of similar construction in cities, where air rights may be the only way to provide needed space?

Bigness certainly will create transportation and parking problems for students and teachers. How great will costs be in these areas and who will bear them? Much depends upon how much student transportation already is available. The greatest costs may fall on suburban areas where students now walk to school. Cities have transit systems; rural areas have school buses; suburbia may or may not have either.

Development of the education park as a new social institution probably will mean that any economies in planning, utilization, construction, etc., will be transformed into specialized facilities and services. This answers the question of what we are trying to save -- money or cities.

However, costs of education already are more than people in many areas want to pay. Cities that always have borne, without question, the burdens of bond issues are now balking. This problem may be eliminated by an apparent trend toward consolidation of school districts, with financial control exercised by larger administrative units. Or, as some have suggested, the focus may center on federal aid, perhaps in the form of an education "fair rights" bill which provides every child a base of quality education.

In many ways these financial implications are much like the problems of segregation. A highly affluent suburban area, with a poverty area next to it, probably will not consolidate with the poor district unless forced to by a higher government. If this is desirable, and is to be achieved, it will require superimposing over those two districts another agency with the authority to mix them.

Tax implications of the new social institution are similar. To get social agencies to provide the services needed in education, when they are needed, may require the authority of a larger agency, with the school system or education park serving as an intermediary.

The education park is a new kind of horse. It needs a new kind of harness. It may wreck many suppositions of education which now exist. It should.

MANAGEMENT

Developing a management prototype for education parks is really quite simple. First you decide that what you want to do is impossible. Then you go ahead and do it.

Success, such as it may be, comes with the realization that you must "think with an S"--in the plural rather than the singular.

Panelists in the management workshop discovered that the term "education park" meant something different to each of them. Only after an initial two hours of spirited discussion did each participant begin to broaden his concepts to consider education parks in general rather than *the* park which is being, or may be planned, in his own particular community. With this accomplished, the group moved toward surprising, almost incredible, unanimity of opinion at the closing session.

Management Considerations

There are many factors involved in the management of an education park, aside from the obvious ones of who will do the managing, what finances will be available, and the extent of managerial authority.

What is the purpose of the park? As one conferee phrased it: "What should go on in the park to make the bus ride worthwhile?" Is it to be an instrument for upgrading the instructional program, a means of facilitating integration, a community center--or all of these things?

What will the park include? Will it restrict itself solely to education or will it follow the emerging pattern of the education park as a new social institution combining a variety of community services in one giant complex? Must it necessarily encompass K-14 or could it be a park consisting of groups of elementary, middle or secondary schools (or any combination) sharing facilities which might not be available to a single school?

Decision-making becomes the key element, coupled with the recognition that these decisions must be made within each community according to its specific needs and desires.

Flexibility, therefore, is indispensable in any system of park management, panelists concluded. Their task was to develop a management structure comprehensive enough to be utilized by parks offering total services, yet designed so that it could be selectively modified and adapted for use in any type of park.

"The education park is a new idea and probably will be far from optimal at the start. You must build in a mechanism for making alterations when you need them", emphasized one panelist.

Nevertheless, it is difficult to decide how to manage something without coming to some kind of agreement on what is to be managed. From necessity, and despite some dissent, came a broad definition of an education park:

"A community-oriented institution offering equal opportunity for quality education, hopefully in an integrated setting".

Most panelists considered quality education the primary responsibility of the education park. Although integration is desirable, and probable in most instances, they maintained that it is secondary and preferred to speak in terms of "equal opportunity".

"There isn't any equal opportunity without integration. That's what the Supreme Court has been saying since 1954", argued one dissenter, adding that he was firmly convinced that the entire park concept has evolved solely to promote integration, with little or no thought of quality education.

His contention was echoed by another participant, who added: "The park concept doesn't stem from a desire to provide more efficient techniques of instruction. You can do that in a small school. The idea is to create a public park which offers a variety of experiences in community living".

Most panelists disagreed with the first part of this statement but supported the rest of it. With a qualifying "where it applies", the majority agreed that the education park should include health, welfare, housing and other services since "quality education involves not only the cognitive process but environmental experiences as well".

The park should be "community-oriented in recreation, culture and social services provided in and outside of the complex", the group noted. Even though ancillary agencies may not be physically located within the park, their services should be utilized and coordinated in park planning and operation.

Establishment of any park requires three major steps: setting goals and objectives, taking a management approach toward planning, and creating an operational management system.

Basic in all three steps is the technique of "starting at the outside and working in". Ignore the tradition which decrees that in the beginning there shall be an administrative organization, panelists advised. The needs of an individual community will determine the park's goals and objectives which, in turn, will determine the managerial hierarchy. If the hierarchy is established first, community needs may be neglected unless they conform and, as one participant warned: "You simply will be abolishing one rigid system and setting up another one".

Goals and Objectives

Setting broad goals is a community function which probably can best be accomplished by an advisory committee of lay citizens who are sensitive to the needs of their community. Establishing specific objectives and methods for implementing them is the job of professional educators and specialists. Neither group should function independently, however. Goals and objectives should be the product of team effort.

Park Planning

Initial planning and actual operation of an education park present separate management problems. Nevertheless, panelists thought it possible to devise a managerial system which could be utilized in both phases, keeping in mind that, ideally, planning never stops. The park never stands still. New needs arise, new goals and objectives are set, new procedures are developed and evaluation is continuous.

Preliminary planning does require certain specifics and at this point the superintendent, as an agent of the school board, probably will be the key coordinator. The community advisory committee must be organized to develop guidelines and responsibilities and state broad goals. Some kind of long-range planning committee must be established, including educators, community representatives, delegates from cooperating agencies, special personnel, teachers and students. Demographic studies must be made and a site selected. Financial resources for capital outlay and per capita allotments for operation must be determined. The park director must be named and must begin selecting his staff. A public relations program must be developed.

Two requirements of vital importance: the role of the board of education must be defined and the superintendent must announce the degree of autonomy he will delegate to the park director.

Education parks necessarily will reflect a growing trend toward decentralization of the school system. Although the board and superintendent still may exercise ultimate authority, the complex nature of the park suggests the need for a high degree of autonomy. Mixing socio-economic and ethnic groups, hiring teachers and changing curricula will probably create unique problems.

Achieving this autonomy may be difficult, if not almost impossible, in some districts where school boards and/or superintendents are reluctant to surrender any authority. In this event, park personnel should still keep plugging for as much freedom as possible, panelists advised. As one phrased it, succinctly if somewhat inelegantly: "There is no substitute for guts".

Park Operation

Conferees agreed that the systems approach is one of the most efficient methods for setting up effective operational management. This involves:

> Outputs--Precisely defined objectives based upon broad goals.
>
> Inputs--As much information as is available on each student and his characteristics (background, interests, capabilities, method of study, etc.).
>
> Analysis--Careful study of all instructional routes and procedures to determine the efficacy of each route in relation to each of the others, so that each student may be guided along the path best for him.

This approach presupposes a constant flow of outputs and inputs, an emphasis on decision-making, and "built-in" assessment, each interacting with the others.

"Management, to me, signifies decision-making at every level, starting at the top and going right down to include teachers and students", emphasized one conferee.

This managerial role, in most cases new to both teachers and students, demands continuous feedback plus constant and rapid evaluation at every level. Computers, serving the entire park, would permit rapid and accurate information storage and retrieval.

Meaningful evaluations must include subjective assessment by park personnel and objective assessment by the community.

"It's hard to build assessment into a system without arousing the wrath of everyone involved in the educative process--teachers, principals, superintendents", admitted one panelist.

"But we must be strong enough to be honest and make accurate reports so that we can predict whether something is erroneous -- and, if so, how? How can we better apply funds or improve instructional methods? We must have continual assessment. The system must be inherently self-improving."

Implementing the systems approach is almost impossible without computers to analyze the huge quantities of necessary data and assist in evaluations, but computer capability depends upon human discretion, the same panelist noted. Data supplied must be as complete as possible but also must be pertinent. Unselectively tossing into a computer every fragment of information that can be scraped up results in "GIGO -- garbage in, garbage out".

"Mod, Mod Management"

At the beginning of the conference when pluralism of education parks was being discussed, one participant noted: "We can't generalize on one type of management for different situations". Yet this is precisely what the group ultimately did.

Out came the chalkboard as conferees took turns trying to synthesize the many ideas which had been offered. Up first -- and down quickly -- was the traditional management flow chart, complete with familiar boxes and lines, which proved graphically that it was unequal to the new task of park management.

The breakthrough came with the group's decision to "get out of the box once and for all" and "set up an umbrella". The flow chart on the following page was the result.

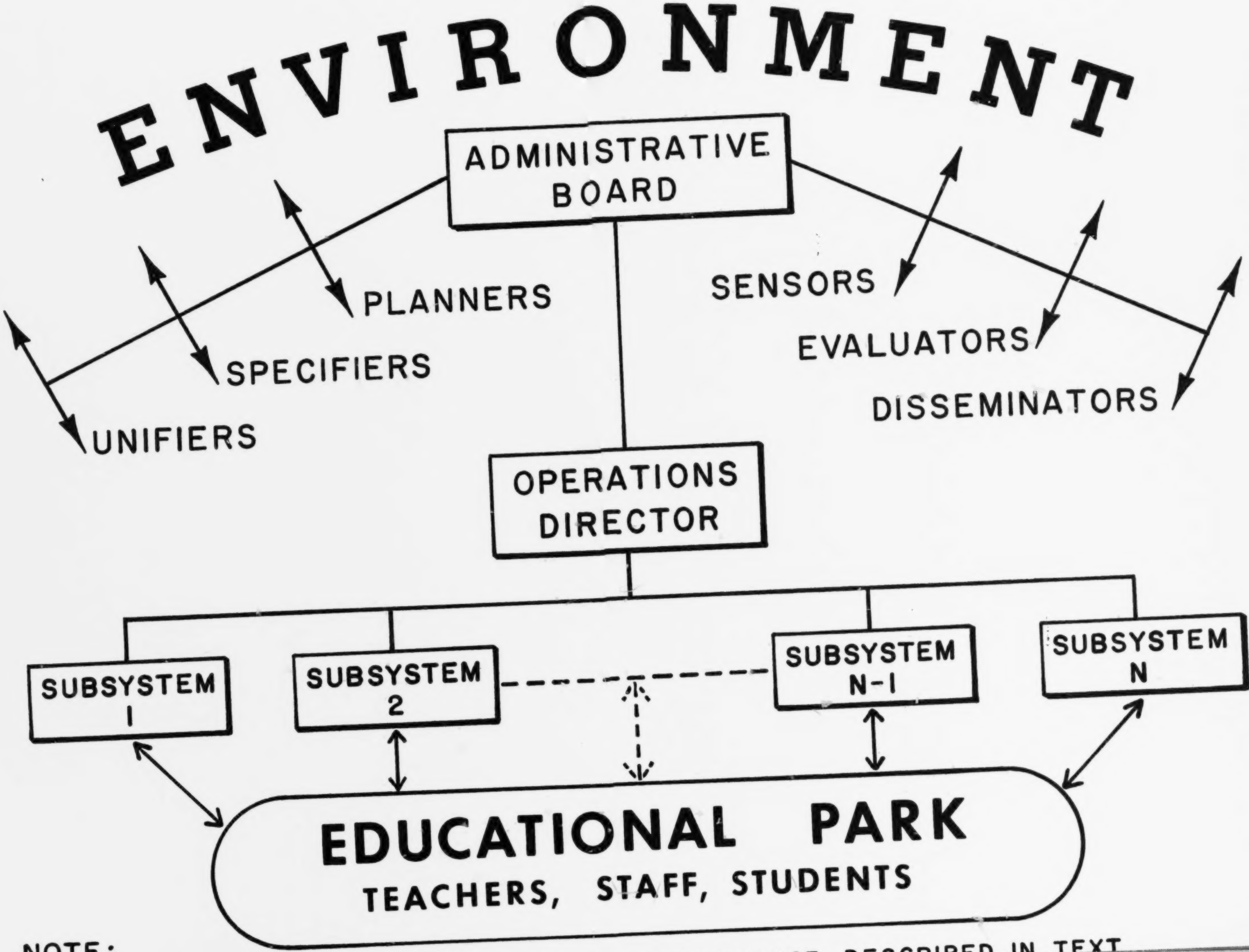
Chart terminology, which may seem "unusual" at first glance, was deliberately chosen to characterize the function of each component. Definitions will be helpful:

Total Environment -- The entire world.

Community -- The geographical area served by the park.

Board -- A group consisting of representatives from the community at large, plus specialists and professional educators.

MANAGEMENT MODEL FOR AN EDUCATIONAL PARK


ENVIRONMENT
ADMINISTRATIVE BOARD
PLANNERS
SPECIFIERS
UNIFIERS
SENSORS
EVALUATORS
DISSEMINATORS
OPERATIONS DIRECTOR
SUBSYSTEM 1
SUBSYSTEM 2
SUBSYSTEM N-1
SUBSYSTEM N
EDUCATIONAL PARK
TEACHERS, STAFF, STUDENTS

NOTE:
TERMINOLOGY, LINE, STAFF, AND ARROW SIGNIFICANCE DESCRIBED IN TEXT

Designers -- Those responsible for planning and setting the broad goals and criteria for the park, in harmony with the environment.

Specifiers -- Those who reduce broad goals to specific objectives, both instructional and behavioral, which can be measured.

Unifiers -- Those who relate to other community needs such as health, welfare, housing, recreation, adult education, vocational-industrial training, cultural activities, etc. Makeup of this group will vary according to each community.

Sensors -- Persons within the community who are sensitive to its overall needs and who will act as a coordinating group, providing liaison between the park and the community. They deal primarily with generalities, differing from Unifiers who are concerned with specifics.

Evaluators -- Those who continuously assess every element of the system and its effectiveness in meeting both broad goals and specific objectives. Some must be professionals in order for their work to be effective but others may be lay members of the community.

Disseminators -- Those responsible for the dual task of keeping the community informed about park activities and exchanging information with all "interested parties" -- other parks, schools, universities, cooperating agencies, business and industry, government at all levels, and possibly foreign representatives.

Director of Operations - The overall "Manager" of the entire park, hopefully permitted a high degree of autonomy and directly responsible to the Board.

Subsystem Managers -- Those responsible for subsystems to meet specific needs: goals, instructional decision-making, curriculum content, methodology, tests and assessment procedures, student records, budget, personnel, all other facets involved in school operation. Subsystems also will vary from one community to another and may include new areas such as after-hours park activities, off-campus programs, etc.

Education Park -- A double area of staff, facilities and organization, plus all people who are a part of the park.

Panelists adopted a "don't fence me in" attitude toward park management. A park can function effectively only if it is developed within the framework of the total environment, they concluded, with continuous interaction among all elements.

Components on either side of the umbrella represent the flexible new structure of the education park and rest on a solid line of responsibility to the Board. These components are characterized by two-headed arrows which cross the line -- pointing outward to indicate outputs to the community, and ultimately the total environment, and inward to indicate inputs of information into the internal structure of the park. The center line, representing this internal structure, conforms to the existing traditional system of management. Double arrows are present once again between the subsystems and the education park and arrows also point outward from the park and into the community. This signifies interaction at all levels to provide a continuous cycle of feedback and assessment to insure self-improvement.

Management considerations reflect the hierarchy of functions -- from broad administrative concerns to specific managerial needs at long-neglected student, guidance, and instructional levels.

Flexibility rules, however. In some communities certain functions may be emphasized over others, depending upon individual needs; some functions may be combined. Each community-park planning term is responsible for details of management structure within its own specific setting.

No attempt is made to specify whether these functions should be fulfilled by individuals or groups. It is possible that "the park director" might be a team. Again, these details are left to the discretion of the community. However, where groups are utilized there must be a chairman, an expert in each area, who assumes final responsibility.

"Regardless of how you break units down in an education park, I haven't seen yet where some one man isn't the one who says what will be done. The 'team approach' is still the president of the board", noted one participant.

"The buck has to stop somewhere", another added.

The flow chart developed by the management committee represents both new and old concepts -- change and no-change.

"We have tried to set up a functional managerial operation to reflect the decision-making requirements in education parks, with due consideration of unique community interaction", explained the coordinator. "However, we also have tried to satisfy the traditional education structure, thereby enabling the introduction of parks, where appropriate, without severe managerial dislocation."

Still there is always reluctance toward change. How can the emerging park concept be explained so that it will be accepted?

"This is a matter of time and a question of each community involved. We must make a concerted and imaginative effort to prepare appropriate communities for the philosophy, potential and introduction of an education park and orient every possible participant in the system", said one panelist.

There are so many questions concerning education parks that no one pretends to have all the answers. Conferees emphasized that the management chart they devised is merely a suggested model, not the last word. It simply provides a point of departure so that individual communities may accept it, argue with it, modify or change it to suit their own specific needs. It is an idea to stimulate more ideas.

The chart will have served its purpose, noted one conferee, "if it does no more than act as an antigen which all the antibodies in the country start attacking".

SOCIAL ASPECTS

The movement for education parks was born of failure and promise.

Ghetto schools add to the social disaster concentrated in the hearts of our great cities. Indeed, they have become the chief means for perpetuating the social and economic deprivation among the urban poor and minority peoples of America. American education must make a sharp change in direction or America as a democratic society will be destroyed.

In response to this grave challenge has come a creative constructive alternative: education parks. Born of a high commitment of quality education for all, the movement for parks is socially responsible, technologically abreast and prudent in its explorations. For the first time in American history, the American education system may learn how to educate all the children of all the people.

A Sense of Community

In a world of alienation and man-made separation, the education park can create a sense of community. To communicate is to share common understandings. By setting out to educate large numbers of children and adults, a common purpose is made the property of thousands of hitherto separated people.

This new sense of community can unite persons of various cultural and ethnic backgrounds in an adventure of mutual discovery. Race, class and neighborhood loosen their constrictive hold on men as they live and learn cooperatively.

Park Control

The education park will be considered as one of the community's most valued resources and, as such, will necessarily be governed by various legal arrangements. Effective control, however, should be lodged with those whose everyday affairs center on the park: parents, neighbors, teachers and administrators. If various social agencies are contributing services to the park, they also should have a voice in its affairs.

A responsibly-operated park government will mean a park that is more responsive and relevant to community needs. Such an outcome will have incalculably beneficial effects on the social stability of urban centers.

Integration

Perhaps the greatest promise of the education park is that it will enable children to be treated as individuals rather than as abstract members of social groups. Three reasons are evident:

In a student body that is socially and racially heterogeneous, there is less chance of social stigma attaching to children of any minority group;

The very broad range of individual abilities represented among students will permit their special academic needs to be served in heterogeneous subgroups, thus, neither social stigma nor advantage is associated with special needs;

Since the park will provide greater opportunities for specialization, teachers can better serve the needs of disadvantaged minority groups.

In sum, the park provides an educationally advantageous setting for true individualization of instruction.

Special precaution must be taken to avoid locating the education park on a site which will create an ethnically homogeneous attendance area. The major educational advantages of urban parks depend crucially upon a heterogeneous student body.

Education parks in wholly homogeneous communities still face the problem of desegregating their faculty and administration, curriculum, reading materials and student activities.

Opportunities

The park's large size may be its most definitive characteristic. Size seems crucial to all the park's advantages. Taken singly smaller units might also provide a favorable context for each of the advantages but when these advantages are grouped and combined, the whole is larger than the sum of its parts.

In a few urban school systems for example, a nurse is available every day and physicians make periodic visits. In most ghetto schools, not even this service is available. An education park could afford a clinic with full-time nurses, physicians and auxiliary personnel.

The scope of the park's attendance area creates, as we saw earlier, a very real possibility for effective integration. The linking-up of sharply improved school health services for all children, linked with increased integration, cannot help but create a deepened sense of community. The ultimate effectiveness of this combination is strongly favored by the mutual reinforcement of each of its elements.

Teachers

In our class-conscious society the status of a teacher is related to the social status of his school. Ghetto schools afford teachers the lowest status, compounding an already-difficult learning situation.

In the education park a teacher's status will depend upon his performance under conditions favoring effective learning. The average teacher will be able to specialize, an opportunity often available only to teachers in socially favored schools. An increase in special services and personnel will eliminate the necessity for keeping especially difficult children in unproductive classroom situations; provisions for diagnosis and therapy will be an integral part of the park.

Changed social circumstances in the park environment should improve teacher performance to some extent but it would be unrealistic to expect the most ordinary teachers to flower suddenly. In-service training will remain vital and probably will be particularly beneficial in the park setting where a variety of exemplary teaching situations can be observed and studied.

The park also can offer more relevant programs for training prospective teachers. The great variety of professional personnel -- social workers, physicians, psychologists, and others -- can be utilized to give the student a more comprehensive introduction to his chosen profession. Novices can be eased into their first teaching assignments step by step, under the supervision of a master teacher who can give greater attention to the newcomer's particular interests and competencies.

Stability of the teaching staff should be greater in an education park. Greater professional and personal satisfaction in their work should induce more teachers to continue careers on the instructional level. No longer will many of the best teachers look toward administrative positions as a refuge from overwhelmingly poor classroom situations.

From Diaper to Doctorate

The coexistence of all academic levels, from nursery school to college and university -- or "from diaper to doctorate" -- is an educational asset which should be offered in a park wherever possible.

Articulation, the orderly passage from one educational level to another, occurs naturally in the park. There is a minimum of overlap as the student is guided through his school career. The basis for guidance is a comprehensive individual inventory of each student. His strengths and weaknesses, his accomplishments and unfulfilled tasks are recorded and considered at appropriate times.

The existence of a quality college in the park can have a high incentive value for the high school student, especially if he comes from a socially-deprived background. If transition to the college is presented as a normal step in the park, the deprived youngster can more easily picture himself as a potential college student. At the same time, a quality college with a sizable enrollment of deprived students will need to develop more relevance in its curriculum content and methodology.

Urban Demography

Planning a large-scale facility such as an education park requires detailed knowledge of population mobility. Data on past, present and projected future movement, as well as possible reasons, must be gathered and analyzed.

The basic purpose of an education park is to provide quality education to children within its attendance area. A subsidiary hope is to help stem the exodus of white middle-class families from the central city. It should be noted, however, that movement from one residence to another is not necessarily motivated by the race issue. Factors such as existing alternate housing and the ease of financing new homes must also be considered. Open-housing practices cannot be expected to affect the tendency of white middle-class families to move to the suburbs but open housing should slow the growth of ghettos as an increasing number of Negroes move to suburbia.

Existing transportation facilities linking suburb to central city could be used to bring suburban children to the doorstep of an urban metropolitan education park. Building the park on air rights over transit terminal points could obviate the need for suburban students to walk through urban areas which might be considered dangerous.

Community Services

The education park community can be bound together by ties of service. Not only schooling for young and old, but cultural recreational and social services can be provided on the park site. The neighborhood school, which at best gives a single service to a very restricted group, is incapable of serving as the core of an organic community.

As a multi-agency community center, serving all age groups, the park will symbolize concern for total family needs. People will go to the park for formal and informal schooling as well as for family counseling, vocational counseling, and legal services. The park can also be a center for organized community action.

Because of the park's large attendance area, short-distance changes of residence -- frequent in disadvantaged areas of the city -- need not result in school transfers. This stabilizing factor can benefit students greatly by giving them long-term identification with a single educational institution.

Conclusion

American education is going through agonizing days. Much that is traditional has proved to be undependable. Much that must be done is still not pinpointed precisely. Change is possible, indeed likely, but painful nevertheless.

The education park is not a panacea. It can not guarantee educational progress although it may provide a more favorable environment for progress. Whether its promise becomes reality will depend upon the resourcefulness and dedication of educators.

The education park cannot be an oasis in the desert of ineffective community life. The greater the mutual contributions of park and community, the greater the park's effectiveness will be.

Preferably, the park should be regarded as an indispensable ingredient in broader plans for community rehabilitation. It cannot, for example, create better housing or increase the long-run supply of jobs but its educational task can be more readily accomplished in a context of decent housing and adequate employment. The park cannot be considered as a device that will automatically achieve its formal purpose regardless of social conditions in the community.

A city has the option to invest enormous sums of tax money in ineffective segregated neighborhood schools. Many are doing so. A community that wants to help resolve the crises of urban decay, wasted people and alienated youth must seek out effective means of educating the young. The education park may be such a means.

SUMMARY: A PARK IS A PARK IS A PARK

What is an Education Park?

Anyone who expects a neatly-capsuled precise definition is expecting the impossible. This may have been one of the most important discoveries made during the entire three-day park conference.

Hours of intensive discussion ultimately fostered the conclusion that the park concept, if it is to fulfill its potential not only will but *must* vary according to the needs and desires of individual communities.

Perhaps past attempts to come up with an all-inclusive, all-purpose, all-American definition of an education park have been self-defeating.

Is there really any point in quibbling about whether a park should be a community-oriented education center or an education-oriented community center? This is a decision that can be made only by each community.

The consensus of conference participants indicates that there can be several different types of education parks. No one of them can possibly be right for everybody, everywhere.

Rather than trying to settle on some arbitrary definition of "a" park, it was deemed more feasible to concentrate on parameters which could serve as guides in the establishment and operation of any park.

There are certain requirements. The combination of a lot of students in a lot of buildings on a lot of ground doesn't automatically constitute an education park.

Although parks may vary in organization, they do have certain common and distinguishing characteristics which identify them as members of the same species. "Not necessarily in the order of importance" -- a phrase repeated frequently throughout the conference -- they include:

Community Orientation

Each park, from its inception, is community-oriented. Its goals and objectives are established for the primary purpose of meeting general and specific community needs. Flexibility is a prerequisite of park organization since these needs will change continually. It is important to have representatives from the community at large as well as specialists and educators assume collective responsibility for park planning and operation.

Total Service Concept

To whatever degree possible, all parks adhere to a total service concept. Some parks are envisioned as a new kind of social institution, a multi-agency center offering educational, cultural, recreational, health, welfare, housing and other specialized services to all age groups. In some areas, however, it may not be possible to construct such large-scale complexes; education parks may be just that -- education parks. Even so, they recognize the relationship of these various services to education and establish a liaison with appropriate agencies within the community.

Integration

Education parks are integrated racially, socio-economically and ethnically. The wide attendance area encompassed by the park almost guarantees a heterogeneous student population. Particularly in urban areas, the park can become a potent instrument for facilitating integration. Some believe that this is the park's only reason for being; others insist that quality education is the park's primary concern, with integration an advantageous by-product. If a park's only purpose is to solve racial problems, will its many benefits be denied to areas where integration is not an issue?

Size

An education park quite obviously has more of everything. Since it is designed to serve a larger geographical area, it has a larger number of students and requires more facilities to house them. No effort is made to set minimum or maximum limits on enrollment. Attendance may range from four hundred to fourteen thousand, or higher, depending upon the park's location.

Parks exemplify the trend toward consolidation by bringing together a number of schools which can share certain facilities in one big complex. Either by necessity or choice, some parks may utilize several separate but neighboring campuses. According to the majority of conference participants, the ideal arrangement is a K-14 organization, plus a university if possible, which permits uninterrupted articulation. It is possible, however, to have a park consisting only of elementary, junior (or middle) and senior high schools, or any combination of these three.

Quality Instruction

A park not only has "more", it has "better". It provides improved learning opportunities and quality education based upon individualized instruction. Superior personnel, content offerings, materials, facilities and equipment combine to provide a curriculum which is relevant to students and to the community.

Continuous Evaluation and Improvement

No matter how good it may be, the education park is never satisfied with the status quo. It thrives on a diet of self-improvement. Taking a systems approach toward park organization enables precise identification of outputs and inputs and analyses of procedures in every area to determine their efficiency and effectiveness. Continuous feedback plus constant and rapid evaluation, both subjective and objective, help to insure a successful operation.

EDUCATION PARKS - AN INVITATIONAL WORK CONFERENCE

Fort Lauderdale, Florida - April 17-19, 1968

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